

Annual Reports December 31, 2018

**Penn Mutual Variable Products** 

#### Dear Investor:

Thank you for your continued affiliation with The Penn Mutual Life Insurance Company. The confidence and trust you place in us reaffirms our commitment to helping policyholders take advantage of all life's possibilities. We also take pride in being a financially strong mutual insurance company that delivers on our promises, and I'm very pleased to bring you the following capital markets summary. Please remember that regardless of what the markets may bring, short-term performance changes should not distract you from your long-term financial plan, and it's a good idea to meet with your investment professional regularly to make sure that your asset allocation remains on target.

Stocks started the year with solid performance and experienced increased volatility throughout the year before ending on a negative note in the fourth quarter. Passage of corporate-friendly tax reform, positive economic fundamentals and strong corporate profit growth sustained U.S. equity prices through the first three quarters of the year. Higher earnings kept valuations reasonable even in light of rising interest rates and cash becoming a more competitive investment alternative. Concerns about narrow stock market leadership — large capitalization names generating the majority of the S&P 500 Index returns — came to be realized in the fourth quarter as technology names led the overall market lower. In this environment, the U.S. stock market, as measured by the Wilshire 5000 Total Market Index, returned –5.27 percent for the full twelve-month period ending December 31.

On a relative basis, large capitalization stocks provided higher, albeit negative, returns than mid and small capitalization stocks during the year. Large capitalization stocks, as measured by the Russell 1000 Index, returned –4.78% percent, while mid capitalization stocks, as measured by the Russell Midcap Index returned –9.06 percent and small capitalization stocks, as measured by the Russell 2000 Index, returned –11.01 percent. From a style perspective, growth stocks outperformed value stocks on a relative basis in all market capitalizations, with the widest disparity being in the mid capitalization space. For instance, mid cap growth stocks, as measured by the Russell Midcap Growth Index returned –4.75 percent while mid cap value stocks, as measured by the Russell Midcap Value Index returned –12.29 percent.

International markets underperformed domestic markets during the year as emerging market stocks posted a -14.25 percent return, as measured by the MSCI Emerging Markets Index, and developed international stocks returned -13.36 percent, as measured by the MSCI EAFE Index. Global economic growth was disappointing this year, especially in light of upbeat expectations from the outset. Signs of economic and financial market stress arose across numerous developed and emerging market economies. U.S. dollar appreciation, coupled with declining commodity prices, created challenges for emerging market economies with significant dollar-denominated liabilities taken since the financial crisis. Escalating trade tensions and new tariffs imposed by the Trump administration pose downside risks to the Chinese economy, which is already struggling with slowing growth and an overheated real estate market.

Investment-grade fixed-income securities outperformed high yield bonds during the twelve-month period as the highest-quality segments of the U.S. investment-grade bond universe, Treasuries and mortgage-backed securities, produced the strongest returns. Investment-grade bonds, as measured by the Bloomberg Barclays U.S. Aggregate Bond Index, returned a nearly flat 0.01 percent and the Bloomberg Barclays U.S. Corporate High Yield Bond Index, returned a –2.08 percent for the year. High yield bonds, whose returns tend to be closely linked to equity performance, were under pressure during the final quarter of the year as stock volatility increased. In addition, energy-sector issuers, which make up a large portion of U.S. high yield indexes, underperformed as oil prices fell drastically amid concerns about oversupply.

Once again, we thank you for the privilege of serving your financial needs and encourage you to work closely with your financial professional to continue to explore your options throughout all life's stages.

Sincerely,

David M. O'Malley

President and Chief Operating Officer

The Penn Mutual Life Insurance Company

President

Penn Series Funds, Inc.

**Source**: This material is not intended to be relied upon as a forecast, research or investment advice, and is not a recommendation, offer or solicitation to buy or sell any securities or to adopt any investment strategy. The opinions expressed are subject to change as subsequent conditions vary. All economic and performance information is historical and not indicative of future results.

## **Table of Contents**

## Penn Series Funds, Inc. Annual Report

Management's Discussion of Fund Performance (Unaudited)	
Limited Maturity Bond Fund	2
Quality Bond Fund	
High Yield Bond Fund	 4
Flexibly Managed Fund	 6
Balanced Fund	
Large Growth Stock Fund	 9
Large Cap Growth Fund	 11
Large Core Growth Fund	 13
Large Cap Value Fund	
Large Core Value Fund	 18
Index 500 Fund	
Mid Cap Growth Fund	 21
Mid Cap Value Fund	 23
Mid Core Value Fund	
SMID Cap Growth Fund	 27
SMID Cap Value Fund	 29
Small Cap Growth Fund	 31
Small Cap Value Fund	 33
Small Cap Index Fund	 35
Developed International Index Fund	 37
International Equity Fund	 39
Emerging Markets Equity Fund	 41
Real Estate Securities Fund	 43
Aggressive Allocation Fund	 45
Moderately Aggressive Allocation Fund	 47
Moderate Allocation Fund	
Moderately Conservative Allocation Fund	 51
Conservative Allocation Fund	 53
mportant Information about Fund Expenses (Unaudited)	 55
Schedules of Investments	 58
Statements of Assets and Liabilities	
Statements of Operations	 177
Statements of Changes in Net Assets	
inancial Highlights	
Notes to Financial Statements	
Report of Independent Registered Public Accounting Firm	
Tax Information	 231
Disclosure of Portfolio Holdings	
oting Proxies on Fund Portfolio Securities	
Fund Management	 233

### **Limited Maturity Bond Fund**

The Penn Series Limited Maturity Bond Fund returned 1.41% for the twelve-month period ending December 31, 2018, compared to the 1.60% return for its benchmark, the Bloomberg Barclays Capital U.S. Government/Credit 1-3 Year Index, for the same period.

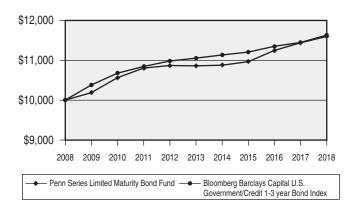
The Federal Reserve under Jerome Powell's leadership continued to tighten monetary policy with four additional rate hikes during 2018. The Treasury yield curve flattened steadily and is approaching an inversion of the yield curve (i.e. short-term rates above long-term rates). We expect the Federal Reserve to pause with future hikes in light of slowing growth abroad and inflation staying in range of its 2% target.

Duration (interest rate risk) management and yield curve positioning benefited Fund performance during the year. We are positioned slightly long duration relative to the benchmark during the current risk off environment but will remain opportunistic with duration and yield curve management. Fund holdings of Treasury Inflation Protected securities (TIPs) detracted from relative performance as inflation expectations moved lower during the second half of the year.

Fund holdings of corporate bonds and structured securities, including collateralized loan obligations, represented another source of value added performance during the first three quarters but underperformed during the fourth quarter. Our positioning up in quality among spread sectors did not insulate Fund performance from broad-based spread widening. We will continue to look for the most attractive relative value opportunities across the fixed income markets and take advantage of interest rate and credit spread volatility heading into 2019.

Penn Mutual Asset Management, LLC Investment Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Limited Maturity Bond Fund on December 31, 2008 would have grown to \$11,599. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Bloomberg Barclays Capital U.S. Government Credit 1–3 Year Bond Index, during the same period. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Government Credit 1–3 Year Bond Index on December 31, 2008 would have grown to \$11,631.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Limited Maturity Bond Fund	1.41%	1.32%	1.49%
Bloomberg Barclays Capital U.S.			
Government/Credit 1-3 year			
Index	1.60%	1.03%	1.52%
Government/Credit 1-3 year	1.60%	1.03%	1.52%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Corporate Bonds	58.0%
Asset Backed Securities	16.1%
Commercial Mortgage Backed	
Securities	15.2%
U.S Treasury Obligation	7.4%
Municipal Bonds	3.3%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments.

## **Management's Discussion of Fund Performance**

### **Quality Bond Fund**

The Penn Series Quality Bond Fund returned –0.14% for the twelve-month period ending December 31, 2018, compared to the 0.01% return for its benchmark, the Bloomberg Barclays Capital U.S. Aggregate Bond Index.

2018 witnessed the return of dormant equity market volatility; initially in February and then again during the fourth quarter when risk markets sold off sharply. Credit markets underperformed during the year with broad-based spread widening among corporate and structured securities. Investment grade corporate bonds widened by approximately 65 basis points after touching post-crisis tight levels in January.

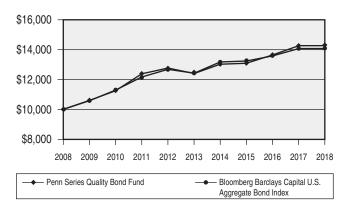
The long anticipated bond bear market gained traction for the first three quarters of the year as Treasury rates moved higher across the yield curve. Interest rates reversed course into year-end as investors sought safety in the midst of extreme market volatility. Yield curve flattening represented the one constant during the year. Four additional Fed rate hikes in 2018 pushed short-term rates higher, while persistent low inflation and weaker commodity prices kept a lid on long-term interest rates.

Duration (interest rate risk) management and yield curve positioning benefited Fund performance during the year. During the current risk off environment, we are positioned slightly long duration relative to the benchmark but will remain opportunistic with duration and yield curve management. Fund holdings of Treasury Inflation Protected securities (TIPs) detracted from relative performance as inflation expectations moved lower during the second half of the year.

Fund holdings of corporate bonds and structured securities, including collateralized loan obligations, represented another source of value added performance during the first three quarters but have underperformed since. Our positioning up in quality among spread sectors did not insulate Fund performance from broad-based spread widening. We will continue to look for the most attractive relative value opportunities across the fixed income markets and take advantage of interest rate and credit spread volatility heading into 2019.

Penn Mutual Asset Management, LLC Investment Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Quality Bond Fund on December 31, 2008 would have grown to \$14,259. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year 5 Year	10 Year
Quality Bond Fund	(0.14%) 2.83%	3.61%
Bloomberg Barclays Capital U.S.		
Aggregate Bond Index	0.01% 2.52%	3.48%

<sup>1</sup> The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Corporate Bonds	52.9%
Commercial Mortgage Backed	
Securities	18.9%
Asset Backed Securities	11.6%
Residential Mortgage Backed	
Securities	6.1%
Municipal Bonds	5.6%
U.S Treasury Obligation	<u>4.9</u> %
	<u>100.0</u> %

Portfolio holdings are presented as a percentage of total investments before short-term investments.

### **High Yield Bond Fund**

The Penn Series High Yield Bond Fund returned -2.35% for the twelve-month period ending December 31, 2018, compared to the -2.37% return for its benchmark, the Credit Suisse High Yield Bond Index for the same time period.

High yield bonds produced negative returns in the reporting period despite the rebound in April following the first first-quarter loss for the asset class since 2008. Lower demand for government debt due to the prospect of a larger federal budget deficit and rising inflation caused Treasury yields to reach multiyear highs during the reporting period. The Federal Reserve continued to shrink its holdings of treasuries and mortgage-backed securities, a process it began in October, and also appeared more committed to a gradual tightening of monetary policy. As widely expected, the Fed announced a quarter-point rate increase following its March policy meeting. It was the first meeting under the leadership of Jerome Powell, who succeeded Janet Yellen as Fed chair in early February. Treasury yields rose in April, with the benchmark 10-year Treasury note moving above 3% for the first time in more than four years before finishing the month at 2.95%. The yield curve continued to flatten during the period as yields of Treasury debt with maturities of two and five years increased more than bonds with longer maturities.

Technical conditions were mixed during the reporting period. According to J.P. Morgan, year-to-date issuance declined 21% compared with the first four months of 2017. The use of proceeds was heavily skewed to refinancing. The asset class experienced negative flows through the first three months of the year. However, in April high yield funds reported the second-largest monthly inflow since December 2016.

Steady economic growth is supportive to below investment-grade issuers, as they are typically more sensitive to macroeconomic factors. However, global geopolitics and central bank policy bring a notable level of uncertainty, but thus far, high yield bonds have remained resilient amid these types of developments. This includes tariff wars, populist sentiment within the European Union, and ongoing rhetoric out of Washington D.C. Corporate fundamentals are largely stable, and we believe default activity will remain below the historical average in 2018 into next year. In addition, we continue to like bank loans for their floating rate feature as Fed officials have signaled the likelihood of two more short-term rate increases in 2018.

In the wireless communications segment, our exposure to Asurion, a loan-only issuer, was a top contributor to performance. Asurion is a global provider of product protection and support services to the wireless, insurance, retail, and home repair service industries. As a handset insurance provider, Asurion benefits from smartphone sales without depending on the execution of one specific wireless carrier. The company has a near-monopoly in mobile protection services in most developed markets. Asurion's scale acts as a significant barrier to entry, allowing it to provide more valuable services to its carrier customers at lower cost versus competitors. Fourthquarter 2017 results revealed significantly higher growth in the U.S., driven by continued subscriber gains and a new product offering. While growth is expected to moderate in 2018, automatic contract renewals by major carriers provide visibility into the future business.

Credit selection in the container industry detracted from relative performance, partly due to our exposure to Kloeckner Pentaplast, a leading global manufacturer of rigid plastic film solutions. The company benefits from leading market positions, a global footprint, as well as strong relationships with a broad range of customers which should allow it to expand and deleverage in a growing market. However, a spike in raw materials costs coupled with poor pricing action from management led to customer losses and lower EBITDA margin in fiscal year 2017.

Absolute yields have risen to more attractive levels but remain well inside the long-term average. We have been able to buy bonds trading below par, but we do not expect capital appreciation to be a significant factor in our returns over the intermediate term. We remain cognizant of volatility, largely external to our market, that could still impact the below investment-grade asset class.

The commentary provided above was from the former subadviser of the Fund, T.Rowe Price who was the manager of the Fund until April 30, 2018.

The fourth quarter of 2018 was marked by a tremendous amount of volatility and a dramatic reversal of the prior three quarters as equity markets sold off and credit spreads widened. The proximate causes were worries slowing global growth, trade fears with China, and a hawkish Federal Reserve. At the same time oil prices declined materially, ending the year down about 40% from the beginning of October. Fund outflows from ETF's and mutual funds created selling pressure and exacerbated a poor liquidity environment. New issuance came to a halt;

## **Management's Discussion of Fund Performance**

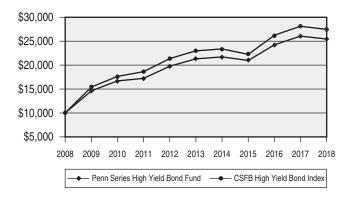
high yield was notable as this was the first December since 2008 with no new issuance.

The Fund, which had been gradually positioning into higher quality and more liquid securities during the second and third quarters, added risk selectively during the fourth quarter. Examples included Cheniere Corpus Christi, Yum Brands, First Data, Sprint, Netflix and Bausch and Lomb. The Fund was roughly market weight in energy, the high yield market's largest sector at about 15%, but is concentrated in higher quality and more stable pipeline credits. The Fund's bank loan exposure stood at about 5%. Syndicated leveraged loans, which had been a bastion of stability during the last few years, finally cracked with the rest of the market. Still, this out of index subsector generally outperformed the broader high yield market during the fourth quarter and contributed to the Fund's performance.

The commentary provided above is from the current Adviser of the Fund, Penn Mutual Asset Management, LLC who assumed day-to-day management of the Fund on May 1, 2018.

## Penn Mutual Asset Management, LLC Investment Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the High Yield Bond Fund on December 31, 2008 would have grown to \$25,455. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the CSFB High Yield Bond Index, during the same period. A \$10,000 investment in the CSFB High Yield Bond Index on December 31, 2008 would have grown to \$27,470.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
High Yield Bond Fund	(2.35%)	3.62%	9.79%
CSFB High Yield Bond Index	(2.37%)	3.65%	10.63%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
BBB/BB Rated & Above	15.9%
BB Rated	12.7%
BB/B Rated	30.1%
B Rated	14.4%
B/CCC Rated	16.1%
CCC and Below	
Not Rated	1.1%
Loan Agreements	8.8%
Equity Securities	0.9%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments.

## **Management's Discussion of Fund Performance**

### **Flexibly Managed Fund**

The Penn Series Flexibly Managed Fund returned 0.48% for the twelve-month period ending December 31, 2018, compared to the –4.38% return of its benchmark, the S&P 500 Index for the same time period.

In 2018, the portfolio posted a slightly positive return and outperformed its all-equity benchmark, the S&P 500 Index. The portfolio outperformed its Morningstar and Lipper peers. The portfolio's equity allocation had a positive return and outperformed the S&P 500 benchmark, which declined. The portfolio's fixed income allocation had a negative return and underperformed its benchmark, the Bloomberg Barclays U.S. Aggregate Bond Index.

U.S. stocks declined in 2018. It was the worst year for the U.S. equity market since 2008. Stocks actually rose for much of the year, though the advance was somewhat sluggish. Market volatility was elevated throughout the year, thanks partly to rising interest rates. Heightened global trade tensions, especially between the U.S. and China, periodically weighed on U.S. and global equity markets during 2018.

We used the market weakness late in the year to add to equity securities that became more attractively valued. Overall, we continue to favor solid businesses with durable earnings profiles that we believe can perform well in a variety of economic environments. We recently increased our overall equity weight, as we bought shares in the industrials and business services, health care, and communication services sectors.

Our overall fixed income weight increased from the prior year, as we added to U.S. 10-year Treasury notes, bank debt, and investment-grade corporate bonds. High yield remains our largest weight within fixed income, as we recently identified high-quality, idiosyncratic opportunities amid a notable increase in credit spreads.

Within equities, utilities benefited relative performance, due to an overweight position and stock selection.

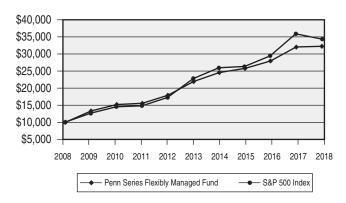
Midwest-regulated utility American Electric Power performed well late in the period from increased investor confidence regarding its longer-term growth trajectory. Security selection in information technology also contributed to relative results. Within the sector, Visa performed better than its sector peers, driven by continued solid execution and better-than-expected revenue guidance for 2019. Conversely, consumer discretionary hindered relative performance, due to stock

selection. Aramark, a leading provider of outsourced food services and uniform rental services, lagged early in the year due to lower-than-expected organic growth and, more recently, from modestly lowering its future revenue growth profile at its investor day. Automotive-seat supplier Adient struggled due to continued operational issues. We eliminated our position in the company to pursue more attractive risk/reward investment opportunities. Consumer staples detracted from relative results, as the positive effects of security selection failed to offset the negative effects of an overweight position.

We are mindful that the factors that spurred the downturn in late 2018 could lead to further challenges, particularly with the U.S. in the later stages of an economic cycle. As a result, we continue to favor solid businesses with durable earnings profiles that we believe can perform well in a variety of economic environments. As always, we remain committed to finding the best risk-adjusted opportunities across the asset class spectrum to help balance our goals of preserving invested capital and generating equity-like returns over the long term with less risk than the broader equity market.

Penn Mutual Asset Management, LLC Investment Adviser
T. Rowe Price Associates, Inc. Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Flexibly Managed Fund on December 31, 2008 would have grown to \$32,211. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the S&P 500 Index, during the same period. A \$10,000 investment in the S&P 500 Index on December 31, 2008 would have grown to \$34,303.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Flexibly Managed Fund	0.48%	8.03%	12.41%
S&P 500 Index	(4.38%)	8.49%	13.12%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Consumer, Non-cyclical	20.6%
Financial	16.9%
Technology	14.5%
Communications	13.9%
Industrial	13.7%
Utilities	9.9%
Consumer, Cyclical	6.3%
Government	2.2%
Energy	1.6%
Asset Backed Securities	0.4%
	<u>100.0</u> %

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

## **Management's Discussion of Fund Performance**

### **Balanced Fund**

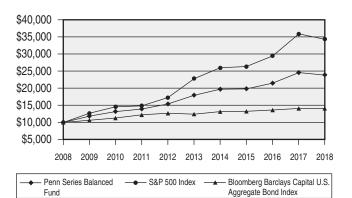
The Penn Series Balanced Fund returned –2.93% for the twelve-month period ending December 31, 2018, compared to its benchmarks, the S&P 500 Index's return of –4.38% and the Bloomberg Barclays Capital U.S. Aggregate Bond Index's return of 0.01% for the same time period.

The Balanced Fund is comprised of a target allocation of 60% to an equity fund and 40% to a fixed income fund. The equity allocation of the Fund is comprised of the Penn Series Index 500 Fund, which is a passively managed S&P 500 Index fund. The fixed income allocation of the Fund consists of an allocation to the Penn Series Quality Bond Fund.

The Fund is actively managed and seeks to outperform its benchmark while generating consistent excess performance. Equity fund and fixed income fund performance closely tracked their respective benchmarks in 2018. While the Fund's fixed income allocation outperformed its benchmark for most of the year, pull back during the fourth quarter occurred due to credit spreads widening.

Penn Mutual Asset Management, LLC Investment Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Balanced Fund on December 31, 2008 would have grown to \$23,846. For the purpose of comparison, the graph also shows the change in the Fund's benchmarks, the S&P 500 Index and the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the S&P 500 Index on December 31, 2008 would have grown to \$34,303. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Balanced Fund	(2.93%)	5.83%	9.08%
S&P 500 Index	(4.38%)	8.49%	13.12%
Bloomberg Barclays Capital U.S.			
Aggregate Bond Index	0.01%	2.52%	3.48%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

#### Asset Allocation Target as of 12/31/18

Index 500	60.0%
Intermediate Bonds	40.0%
	100.0%

## **Management's Discussion of Fund Performance**

### **Large Growth Stock Fund**

The Penn Series Large Growth Stock Fund returned –1.31% for the twelve-month period ending December 31, 2018, compared to the –1.51% return for its benchmark, the Russell 1000 Growth Index for the same time period.

The portfolio delivered modestly negative returns for the 12 months ended December 31, 2018, outpacing the benchmark Russell 1000 Growth Index. Overall, group weighting was responsible for relative outperformance, as stock selection detracted slightly. Information technology was the leading relative outperformer, followed by industrials and business services and materials. Consumer discretionary and financials were the largest relative detractors.

In 2018, U.S. stocks experienced their worst calendar year losses in a decade, under pressure from rising interest rates, global trade tensions, and worries about slowing global growth. Most major U.S. stock indexes reached all-time highs near the end of the third quarter but plunged in the final months of the year. Market volatility was elevated throughout the year, thanks in part to rising interest rates, as the Federal Reserve continued its normalization of monetary policy. Large-cap stocks outpaced mid- and small-caps, as measured by Russell indexes, with growth broadly outpacing value.

In information technology, stock choices boosted relative results, led by a position in Red Hat, which advanced as growing demand for hybrid cloud solutions and a record number of large deals fueled topline growth. Shares traded higher after the announcement that the company would be acquired by IBM in an effort to gain a foothold in the cloud era of enterprise technology. Below-benchmark exposure to Apple bolstered relative performance, as shares sold off due to softer-than-expected demand for the latest iPhone launch, particularly in China. Shares of Workday appreciated due to better-than-expected organic subscription revenue and billings growth, driven by momentum with mid-market customers.

Underweighting and security selection in industrials and business services had a positive relative impact, due in part to above-benchmark exposure to Boeing, which benefited from continued expansion of operating margins. Belowbenchmark exposure to the materials sector also aided relative performance.

In contrast, security selection within consumer discretionary weighed on relative returns. Investor sentiment for Alibaba Group Holding waned due to

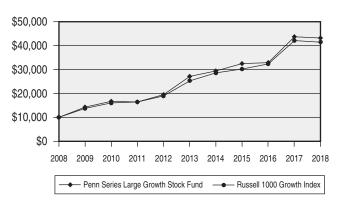
concerns over trade and regulatory uncertainty in China and the impending departure of chairman and founder Jack Ma.

Financials also detracted on a relative basis, largely on stock choices; an overweight to the sector also had a negative impact. Shares of Morgan Stanley came under pressure due to investor concerns over decelerating transaction revenue and compression of advisory fees impacting results of the company's wealth management division. Shares were weighed down further at year-end as growing fears of recession in 2019 caused bank stocks to sell off.

Although the fourth-quarter market sell-off was painful, we were not surprised to see a downturn given the length of the bull market and the third-quarter rally that pushed some equity valuations to overly elevated levels. Entering 2019, our expectations are more muted than they were a year ago, although we do not believe a near-term recession is likely. We believe corporate earnings and economic growth could increase at a slower pace than in 2018 but should remain positive. We are concerned about the effects of the U.S./China trade dispute, although a resolution to the standoff could boost markets.

Penn Mutual Asset Management, LLC Investment Adviser T. Rowe Price Associates, Inc. Investment Sub-Adviser

Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Large Growth Stock Fund on December 31, 2008 would have grown to \$43,193. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 1000 Growth Index, during the same period. A \$10,000 investment in the Russell 1000 Growth Index on December 31, 2008 would have grown to \$41,481.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Large Growth Stock Fund	(1.31%)	9.73%	15.76%
Russell 1000 Growth Index	(1.51%)	10.40%	15.29%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Communications	29.8%
Consumer, Non-cyclical	21.1%
Technology	18.1%
Financial	12.1%
Consumer, Cyclical	9.5%
Industrial	7.2%
Utilities	1.5%
Basic Materials	0.7%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Large Cap Growth Fund**

The Penn Series Large Cap Growth Fund returned 0.68% for the twelve-month period ending December 31, 2018, compared to the –1.51% return for its benchmark, the Russell 1000 Growth Index for the same time period.

During the reporting period, the US Federal Reserve raised interest rates by 100 basis points, bringing the total number of rate hikes to nine since the central bank began to normalize monetary policy in late 2015. Economic growth rates in the US, Eurozone and Japan remained above trend, despite a slowing in global growth, particularly toward the end of the period. Inflation remained contained, particularly outside the US. Late in the period, the European Central Bank halted its asset purchase program but issued forward guidance that it does not expect to raise interest rates at least until after the summer of 2019. The Bank of England (once) and the Bank of Canada (three times) each raised rates during the period. The European political backdrop became a bit more volatile, late in the period, spurred by concerns over cohesion in the eurozone after the election of an antiestablishment, Eurosceptic coalition government in Italy and widespread protests over stagnant wage growth in France.

Bond yields rose in the US during most of the period, but remained low by historical standards and slipped from their highs, late in the period, as market volatility increased. Yields in many developed markets fell. Outside of emerging markets, where spreads and currencies came under pressure, credit spreads remained quite tight until the end of the period, when thinner liquidity, lower oil prices and concerns over high degrees of corporate leverage emerged. Growing concern over increasing global trade friction appeared to have weighed on business sentiment during the period's second half, especially outside the US. Tighter financial conditions from rising US rates and a strong dollar, combined with trade uncertainty, helped expose structural weaknesses in several emerging markets in the second half of the period.

Volatility increased at the end of the period, amid signs of slowing global economic growth and increasing trade tensions, which prompted a market setback shortly after US markets set record highs in September. It was the second such equity market decline during the reporting period. The correction came despite a third consecutive quarter of strong growth in US earnings per share. Strong earnings growth, combined with the market decline, brought US equity valuations down from elevated levels,

earlier in the period, to multiples more in line with longterm averages. While the US economy held up better than most, global economic growth became less synchronized during the period, with Europe and China showing signs of a slowdown and some emerging markets coming under stress.

Stock selection and, to a lesser extent, an underweight allocation to the industrials sector contributed to the portfolio's performance relative to the Russell 1000 Growth Index. Within this sector, an overweight position in analytics and risk assessment services provider Verisk Analytics bolstered relative results.

Stock selection in both the communication services and health care sectors also benefited relative returns. Within the communication services sector, not owning shares of social networking firm Facebook aided relative results. Within the health care sector, the portfolio's holdings of diversified healthcare products developer Abbott Laboratories and an overweight position in life sciences supply company Thermo Fisher Scientific buoyed relative returns.

Other top relative contributors during the period included the portfolio's overweight positions in coffee and tea company Starbucks, athletic shoes and apparel manufacturer NIKE, retail chain operator TJX Companies and water, hygiene and energy technologies and services provider Ecolab. Additionally, not owning shares of computer graphics processor maker NVIDIA and tobacco company Altria Group strengthened relative returns.

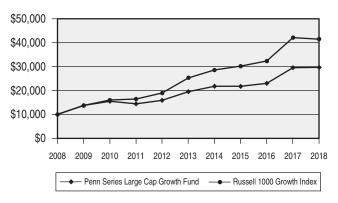
An overweight allocation and stock selection in the consumer staples sector detracted from relative results. Within this sector, the portfolio's position in shares of beauty products company Coty and an overweight position in consumer products company Colgate-Palmolive weighed on relative returns.

Elsewhere, not owning shares of online retailer and web services provider Amazon.com and health insurance and Medicare/Medicaid provider UnitedHealth Group, and the portfolio's overweight positions in video game developer Electronic Arts, hindered relative performance. In addition, the portfolio's holdings of global industrial manufacturing and engineering company Colfax, international betting and gaming company Paddy Power Betfair (Ireland), oil field services company Schlumberger and Chinese online and mobile retailer Alibaba Group Holding, and an underweight position in software giant Microsoft, further weighed on relative returns.

## **Management's Discussion of Fund Performance**

Penn Mutual Asset Management, LLC Investment Adviser MFS Investments Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Large Cap Growth Fund on December 31, 2008 would have grown to \$29,734. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 1000 Growth Index, during the same period. A \$10,000 investment in the Russell 1000 Growth Index on December 31, 2008 would have grown to \$41,481.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Large Cap Growth Fund	0.68%	8.73%	11.51%
Russell 1000 Growth Index	(1.51%)	10.40%	15.29%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Technology	25.3%
Consumer, Non-cyclical	23.9%
Consumer, Cyclical	12.0%
Financial	11.8%
Communications	11.7%
Industrial	11.6%
Basic Materials	3.6%
Energy	0.1%
Grand Total	<u>100.0</u> %

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Large Core Growth Fund**

The Penn Series Large Core Growth Fund returned 3.42% for the twelve-month period ending December 31, 2018, compared to the -1.51% return for its benchmark, the Russell 1000 Growth Index for the same time period.

U.S. stocks ended the year with a loss, as anxiety over rising downside risks overwhelmed positive fundamental data. While most other major world economies were slowing, the U.S. economy accelerated in 2018. A tight labor market and rising wages supported consumer spending and confidence. Corporate earnings and revenues were robust, aided by tailwinds from tax cuts and deregulation. However, looming risks from geopolitical uncertainties, especially U.S.-China trade relations, and tightening financial conditions began to take a toll on investor sentiment and corporate earnings outlooks. Market volatility increased markedly from 2017's historically low levels, with especially sharp price swings in February, October and December 2018.

Within the Russell 1000 Growth Index, utilities, consumer discretionary and information technology were the best-performing sectors, while energy, materials and communication services were the weakest performers.

The long-term investment horizon and conviction-weighted investment approach, embraced by the team since 1998, can result in periods of performance deviation from the benchmark and peers. In this reporting period, favorable stock selection drove relative outperformance, while sector allocation was a mild detractor.

The consumer discretionary, information technology and industrials sectors contributed the most to relative performance. Both stock selection and an overweight allocation in consumer discretionary were advantageous, led by strong results from online retail and cloud computing leader Amazon, which was also the top contributing holding across the whole portfolio for the period. Our stock selection in information technology added value, led by cloud-based human resources and financial management software provider Workday, but relative gains were partially offset by an underweight to the sector, which detracted. In the industrials sector, our stock selection was beneficial and more than made up for the relative loss from an overweight to the sector.

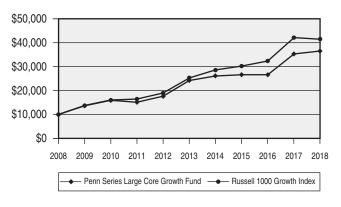
The materials and financials sectors were the largest sector detractors in the reporting period. The overweight allocation to materials was detrimental as the sector was among the worst performing areas of the market, while

stock selection in financials underperformed. The largest detractor across the portfolio was a communication services stock, video game publisher Activision Blizzard.

Our team continues to focus on bottom-up stock selection and the long-term outlook for companies owned in the portfolio; as our ongoing work reaffirms our assessment of quality and competitive advantage in the names we own. At the end of the period, the Fund's largest sector weights were in information technology, consumer discretionary and communication services. The Fund had no exposure to the consumer staples, energy, real estate and utilities sectors.

Penn Mutual Asset Management, LLC Investment Adviser Morgan Stanley Investment Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Large Core Growth Fund on December 31, 2008 would have grown to \$36,514. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 1000 Growth Index, during the same period. A \$10,000 investment in the Russell 1000 Growth Index on December 31, 2008 would have grown to \$41,481.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Large Core Growth Fund	3.42%	8.53%	13.83%
Russell 1000 Growth Index	(1.51%)	10.40%	15.29%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Communications	29.58%
Technology	25.53%
Consumer, Non-cyclical	20.13%
Industrial	12.82%
Consumer, Cyclical	10.32%
Basic Materials	1.62%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Large Cap Value Fund**

The Penn Series Large Cap Value Fund returned –7.71% for the twelve-month period ending December 31, 2018, compared to the –8.27% return for its benchmark, the Russell 1000 Value Index for the same time period.

Gains in US equity markets have been driven by the persistent strength of the US economy and associated increases in consumer, business and investor confidence. The improvement in economic and business conditions has also fed through to corporate profits, leading to better-than-expected results and prompting analysts to increase their estimates for future earnings. Positive market sentiment has overcome investor concerns related to trade policy and ongoing interest rate increases by the US Federal Reserve (Fed), resulting in robust, broad-based gains for US equities.

Relative outperformance was broad based and driven by solid stock selection in the healthcare, industrials, consumer staples, utilities, consumer discretionary and telecommunications sectors. A continued underweight to the consumer staples sector plus an overweight to healthcare also contributed to overall return. Detracting most from performance was stock selection within the financials and materials sectors.

The top contributors to outperformance were Microsoft Corporation, Advance Auto Parts and Cisco Systems. Software company, Microsoft has performed well due to its ongoing transition to subscription revenue from its Office 365 customers, as well as its success with its Azure Cloud computing platform. A combination of better-thanexpected revenue, strong free cash flow and heightened positive sentiment about its long-term growth prospects also supported shares over the period. Shares of auto supply retailer, Advance Auto Parts have also outperformed year-to-date, as they continue to work through their turnaround plan. After underperforming in 2017, shares have risen dramatically driven by improved execution and favorable trends in the auto aftermarket industry. Cisco Systems, a communication equipment company, has outperformed following better than expected growth. In addition, tax reform enabled the company to increase the dividend by 14% and repurchase more stock.

Detracting from performance were Diebold Nixdorf Incorporated, Wells Fargo & Company and Phillips International. Shares of Diebold Nixdorf, the ATM servicer and software provider, have underperformed in part because of payments made to those Wincor Nixdorf shareholders that chose not to tender their shares during Diebold's 2016 acquisition. Wells Fargo & Co., a diversified bank, underperformed post receiving an unprecedented consent order from the Fed mandating them to restructure their board of directors, restrict asset growth and reduce earnings. Also weighing on shares was the confluence of equity markets turning negative, loan growth slowing further and further yield curve flattening. Shares of tobacco company, Phillip Morris declined significantly post reporting Q1 earnings. The results themselves were strong; however the company reported decelerating market share trends of its new innovative product, iQOS, in Japan. This has been a critical monitoring point for investors and the slowdown was widely unexpected given management's optimistic commentary at various investor events throughout the quarter.

The commentary provided above was from the former sub-adviser of the Fund, Loomis, Sayles & Company, L.P. who was the manager of the Fund until September 30, 2018.

US equities fell sharply in the fourth quarter, reversing gains from earlier in the year. The S&P 500 Index suffered its biggest quarterly decline since 2011. Large-cap value outperformed large-cap growth as the Russell 1000 Value Index and Russell 1000 Growth Index declined 11.72% and 15.89%, respectively, in US-dollar terms.

Volatility returned to markets amid signs of a global economic slowdown, concerns over monetary policy, political dysfunction, inflation fears and worries about increased regulation in the technology sector. US stocks were further impacted as the Federal Reserve hiked interest rates, sparking concerns about a policy mistake, and investors grew anxious about the outlook for corporate earnings growth amid a more challenging global growth environment and as the benefits of tax reform roll off.

For the quarter, the only sector to post positive returns was utilities. Energy stocks fell as the price of oil continued to plummet. Industrials, technology and consumer discretionary stocks were also among the worst performers.

The US Relative Value Portfolio declined in absolute terms and underperformed its benchmark, the Russell 1000 Value. Security selection drove the underperformance, particularly among industrials, financials and technology holdings. This was partly offset by outperformance and an overweight in communication services. Sector selection

contributed to performance, as the portfolio benefited from underweights to the energy and materials sectors. An underweight to the defensive utilities sector and an overweight to industrials detracted. As we find attractive opportunities, we have been increasing our weight to industrials given the large price pullback in the sector amid concerns of a possible US recession, China's slowdown and ongoing trade wars.

Industrial names were among the biggest detractors in the quarter. Among them were defense contractor Raytheon and Altra Industrial Motion, a manufacturer of mechanical power transmission and motion control systems used in auto and industrial applications. Raytheon declined amid concerns over the impact of the Saudi Arabia situation on future missile defense orders and the potential impact of the midterm elections on government defense budgets.

Altra Industrial Motion detracted largely on concerns over the broader global macro growth slowdown. We like the position, as we still see a healthy end-market demand for its products and appreciate its attractive free-cash-flow yield and high-quality balance sheet. Altra Industrial's recent acquisition of Fortive's automation and specialty platform business should allow it to penetrate higher growth markets, namely motion-control markets, and achieve cost synergies.

Noble Energy detracted amid weakness in the quarter for the broader energy sector. Furthermore, Noble Energy underperformed after the company reported lower-than-expected earnings and higher-than-expected costs going forward. Our thesis centers on Noble's attractive valuation, with anticipated free-cash-flow improvement once its large Israeli project, Leviathan, starts up in 2019 and management's continued aggressive buyback of shares.

Verizon contributed in the quarter because of its less cyclical business exposure and stabilizing mobile phone churn. We continue to like the position given the company's leading status among wireless carriers, large free-cash-flow generation, attractive valuation and early-stage exposure to the upcoming 5G network upgrade, which will allow faster internet speeds over existing 4G networks and cable providers.

Leading oncology pharmaceutical company Roche contributed, as it reported very strong quarterly results driven by its Avastin, Herceptin and Rituxan products. US sales growth was attributed to better pricing and higher volumes. Additionally, management reconfirmed its full-year guidance. We continue to like the company, as we

believe that the market is overly concerned with biosimilar competition in the near term.

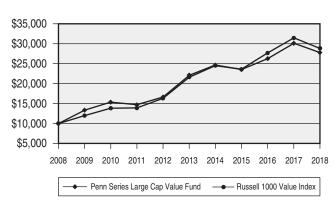
Pharmaceutical company Eli Lilly was among the top contributors after reporting a third quarter with earnings that were better than consensus. The company reported strong top-line growth driven by several of its diabetes therapies (Humalog, Trulicity and Basaglar). Furthermore, management raised anticipated future sales and margin figures and announced a new \$8 billion share buyback program. We believe that Eli Lilly is a diversified pharmaceutical company that, unlike many of its competitors, has avoided the albatross of making large value-destroying deals.

There are some indications that economic growth is slowing as the market absorbs the impact of several years of steady monetary-policy tightening. That should be viewed as good news: the economy has been operating above potential for several quarters, and a deceleration to a more trend-like growth rate reduces the risks of overheating and financial market imbalances. The market seems concerned that a gradual deceleration will rapidly snowball into something more significant. We think those concerns are misplaced. Incoming data continues to paint a picture of a healthy economy, and we think there is plenty of forward momentum to keep growth solid for several more quarters.

The commentary provided above is from the current sub-adviser of the Fund, AllianceBernstein L.P. who assumed day-to-day management of the Fund on October 1, 2018.

Penn Mutual Asset Management, LLC Investment Adviser AllianceBernstein Investment Sub-Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Large Cap Value Fund on December 31, 2008 would have grown to \$27,805. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 1000 Value Index, during the same period. A \$10,000 investment in the Russell 1000 Value Index on December 31, 2008 would have grown to \$28,853.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Large Cap Value Fund	(7.71%)	4.68%	10.77%
Russell 1000 Value Index	(8.27%)	5.95%	11.18%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Financial	25.1%
Consumer, Non-cyclical	18.5%
Communications	15.0%
Industrial	13.7%
Consumer, Cyclical	13.2%
Energy	10.4%
Technology	4.1%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### Large Core Value Fund

The Penn Series Large Core Value Fund returned –6.60% for the twelve-month period ending December 31, 2018, compared to the –8.27% return for its benchmark, the Russell 1000 Value Index for the same time period.

Despite elevated volatility levels emanating from investor concerns related to U.S. Federal Reserve monetary policy direction, coupled with a global trade war and slowing economic growth worries, domestic equities posted attractive, generally double-digit, returns through the first nine months of calendar year 2018. That changed markedly over the final three months of the year as equity markets plunged amid signs of a slowing global economy accompanied by worrisome political uncertainties.

Fears of a global trade war from President Trump's imposition of broad new import tariffs came to life, as retaliatory actions by China and other countries adversely impacted U.S. companies' overseas business. Global stock markets, which had already begun to weaken, accelerated their fall in the fourth quarter 2018. A range of political uncertainties from the November U.S. midterm elections to the fate of Britain's planned "Brexit" from the European Union, weighed heavily on global stocks.

Despite the stock market pullback, U.S. economic data remained largely positive during the period, prompting the Fed to raise its benchmark interest rate in December for the fourth time in 2018. Investors were more receptive when the Fed indicated it might reconsider plans to continue interest-rate hikes in 2019. Despite a partial rebound in the final days of the period, the U.S. stock market's December plunge was its worst monthly loss since the 2008 financial crisis.

Investor malaise reflected in stock indexes globally for calendar year 2018. In the U.S., the S&P 500 Index dropped 4.38%. Globally, the MSCI EAFE Index declined 13.79%. Large-cap stocks outperformed their small-cap counterparts during the period.

The Fund's outperformance versus the index was primarily the result of strong stock selection, while sector allocation had a modestly negative impact for the period. Among U.S. large-cap equities, growth stocks outperformed value stocks during the period by a wide margin. Nine of the eleven economic sectors within the Index registered negative returns, with industrials, energy, and materials posting the most challenged returns. Health care and utilities were the lone sectors with positive performance over the period.

Strong broad-based stock selection boosted relative performance results over the period, with positive stock selection results registered in 9 of the 11 sectors. Stock selection contributed most in the consumer discretionary, communication services, and materials sectors. An underweight to the financials sector, which lagged the broader market, was a contributor to the Fund's performance vs. the Index. The Fund's top relative contributor for the period was an overweight position in medical device manufacturer Boston Scientific. Within consumer discretionary, the Fund's exposure to athletic apparel retailer Lululemon Athletica contributed to relative performance. Elsewhere, overweight positions in rail operator CSX, pharmaceuticals company Merck, and utilities firm NextEra Energy benefited relative performance.

On a sector basis, an underweight exposure to information technology, as well unfavorable stock selection within that sector, detracted from relative performance. The Fund's top relative detractor during the period was an overweight exposure to oil and natural gas services provider Haliburton. Within information technology, the Fund's avoidance of Cisco Systems, which outpaced the broader market, along with exposure to Intel, represented a drag on relative performance. Elsewhere, overweight positions in industrials firms Fluor and Gardner Denver, as well as exposure to poor-performing financial services company Credit Suisse, detracted from relative results.

Further retrenchment may occur in the next few months before stock markets find a bottom. One positive for stocks is that valuations are well off their peak following two months of decline. However, any sign of corporate earnings weakness would bode more difficulty for stocks. Similarly, with economic data remaining largely positive thus far, observers will closely monitor key indicators such as unemployment claims, housing starts and consumer confidence for signs of weakness that could foretell a recession.

All eyes will be on the Fed during the first quarter of 2019 to see if it scales back planned interest-rate hikes. Overseas, China's economic weakness and political uncertainties over the global trade war, as well as Britain's planned "Brexit" from the European Union, all raise caution flags for investors.

Notable sector changes during the quarter included moving from overweight positions in communication services and real estate to underweight positions, and moving from underweights in health care and consumer

discretionary to overweights in those groups. Looking at individual securities, sales during the quarter included holdings that had reached a fair valuation or experienced deteriorating fundamentals. Notable sales included internet service giant Alphabet Inc., specialty spice and seasoning maker McCormick & Co., and coffee retail giant Starbucks. Notable purchases during the quarter include consumer products conglomerate Proctor & Gamble, power tool maker Stanley Black & Decker, and home improvement retailer Home Depot.

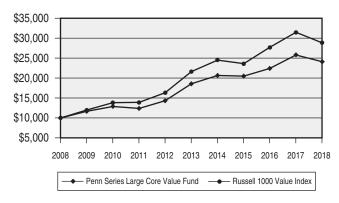
In regards to sector weights at quarter end, the Fund's largest overweights are to the industrials and consumer discretionary sectors, while the largest underweights are to information technology, real estate, and communication services.

Volatility is likely to remain a persistent market feature looking forward with ongoing trade disputes, fed policy decisions, China's economic path, and Brexit among factors that may weigh on investor sentiment. While volatility risk is high, the Value Team's investment approach remains centered on selecting individual securities with an asymmetric risk/reward profile, not about making macroeconomic forecasts.

As always, we remain committed to our bottom-up, fundamental investment process. We continue to seek out leading companies that possess advantaged business models, financial discipline and management team's that make thoughtful capital allocation decisions, yet which trade at a discount to what we estimate as the firm's intrinsic value. We believe this may serve our clients throughout 2019 and beyond.

Penn Mutual Asset Management, LLC Investment Adviser Eaton Vance Management Investment Sub-Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Large Core Value Fund on December 31, 2008 would have grown to \$24,114. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 1000 Value Index, during the same period. A \$10,000 investment in the Russell 1000 Value Index on December 31, 2008 would have grown to \$28,853.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year 5 Year	10 Year
Large Core Value Fund	(6.60%) 5.41%	9.20%
Russell 1000 Value Index	(8.27%) 5.95%	11.18%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Financial	25.2%
Consumer, Non-cyclical	24.3%
Industrial	12.3%
Energy	9.9%
Utilities	7.0%
Technology	6.5%
Communications	6.4%
Consumer, Cyclical	6.2%
Basic Materials	2.2%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### Index 500 Fund

The Penn Series Index 500 Fund returned –4.76% for the twelve-month period ending December 31, 2018, compared to the –4.38% return for its benchmark, the S&P 500 Index for the same time period.

The Fund and Index returns reflect the reinvestment of dividends and other income. The Fund's performance reflects the expenses of managing the Fund, including brokerage and advisory expenses. The Index is unmanaged and Index returns do not reflect fees and expenses of any kind, which would have a negative impact on returns.

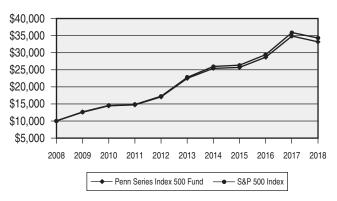
Security misweights, the primary driver of Fund performance during the reporting period, contributed to a –1 basis point performance difference relative to the Index.

The Fund used futures in order to gain market exposure for the cash position during the reporting period. The Fund's use of future detracted zero basis points from Fund performance relative to the Index.

On an individual security level, the top positive contributors to the Fund's performance during the reporting period were Microsoft Corporation, Amazon.com, Inc. and Merck & Co., Inc. The top negative contributors to the Fund's performance during the reporting period were Facebook, Inc., General Electric Company and AT&T Inc.

Penn Mutual Asset Management, LLC Investment Adviser State Street Global Advisors Investment Sub-Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Index 500 Fund on December 31, 2008 would have grown to \$33,169. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the S&P 500 Index, during the same period. A \$10,000 investment in the S&P 500 Index on December 31, 2008 would have grown to \$34,303.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Index 500 Fund	(4.76%)	8.10%	12.74%
S&P 500 Index	(4.38%)	8.49%	13.12%

<sup>1</sup> The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Consumer, Non-cyclical	23.3%
Financial	17.9%
Technology	15.9%
Communications	14.5%
Industrial	9.1%
Consumer, Cyclical	8.4%
Energy	5.3%
Utilities	3.3%
Basic Materials	2.2%
Government	0.1%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Mid Cap Growth Fund**

The Penn Series Mid Cap Growth Fund returned 0.26% for the twelve-month period ending December 31, 2018, compared to the –4.75% return for its benchmark, the Russell Midcap Growth Index for the same time period.

The managers primarily emphasize a bottom-up approach and may look at a number of factors in its consideration of a company. These include new or innovative products or services, adaptive or creative management, strong financial and operational capabilities to sustain multi-year growth, market potential, profit potential, stable and consistent revenue, earnings, and cash flow.

For the reporting period, the Fund outperformed the benchmark. Strong results in our health care and consumer discretionary sectors drove the positive relative return for the Fund in 2018, with stock selection key to the outperformance. Industrials, financials, communication services and materials, also made solid positive contributions to performance based on a combination of strong stock selection, in the case of industrials, financials and communication services, and sector allocation, in the case of materials. Other sectors in the Fund that saw a positive contribution were utilities and real estate, both at zero exposure in the Fund. Sectors that made a negative contribution to relative performance were information technology, where sector allocation with respect to an underweight position drove results, consumer staples and energy. Cash was 0.09% to the negative, while equity options were 0.01% to the negative. Any derivatives usage during the measurement period did not have a specific impact on performance and was based primarily on individual issues (selling puts to potentially gain access to a holding at a target price or selling calls to exit a holding).

Our health care sector exposure made the greatest positive contribution to the Fund's return. We were overweight in this outperforming sector, and our names far outperformed the health care stocks in the index, gaining almost 18% on average against a less than 0.5% gain for the health care sector overall. Limited exposure to biotechnology stocks was a benefit to our Fund, as those names really struggled in 2018, mostly delivering steep declines, often as much as one-third to one-half their value. However, the vast outperformance for our health care group came from solid positive returns across the calendar year from most of our holdings.

Solid performance from our consumer discretionary names was another important factor in our outperformance in

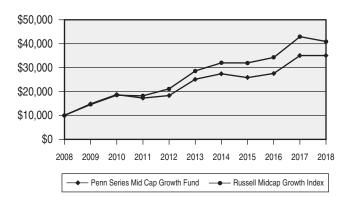
2018. We were overweight in this underperforming group, with much of the excess weight in our strongest names, most of which delivered positive performance last calendar year. Industrials, financials and communication services exposure provided a positive contribution.

Information technology exposure produced the biggest negative contribution to performance, largely related to sector allocation, as we were significantly underweight in this outperforming sector. Consumer staples and energy exposure also contributed negatively to performance. We had no exposure to real estate and utilities sectors, which contributed 0.13% and 0.02% to index performance, respectively.

The top three securities contributing to the Fund's relative performance for the reporting period were Chipotle Mexican Grill, Intuitive Surgical, Inc. and Lululemon Athletica, Inc. The top three securities detracting from the Fund's relative performance for the reporting period were Mohawk Industries, Inc., Dentsply Sirona, Inc. and Polaris Industries, Inc.

Penn Mutual Asset Management, LLC Investment Adviser Ivy Investment Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Mid Cap Growth Fund on December 31, 2008 would have grown to \$35,074. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell Midcap Growth Index, during the same period. A \$10,000 investment in the Russell Midcap Growth Index on December 31, 2008 would have grown to \$40,880.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Mid Cap Growth Fund	0.26%	6.94%	13.37%
Russell MidCap Growth Index	(4.75%)	7.42%	15.12%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Consumer, Non-cyclical	27.1%
Consumer, Cyclical	22.9%
Technology	17.0%
Industrial	16.7%
Communications	8.6%
Financial	5.2%
Basic Materials	2.5%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

## **Management's Discussion of Fund Performance**

### Mid Cap Value Fund

The Penn Series Mid Cap Value Fund returned –15.20% for the twelve-month period ending December 31, 2018, compared to the –12.29% return for its benchmark, the Russell Midcap Value Index for the same time period.

During the final quarter of 2018, investor focus shifted from the positive backdrop of solid economic and earnings growth, low unemployment and relatively low interest rates, to a negative focus on Federal Reserve tightening, the impact of tariffs on global growth, declining oil prices, a flattening yield curve, widening credit spreads and leveraged corporate balance sheets.

Typically during severe market dislocations such as the one experienced in December, investor panic leads to a flight from perceived risk, regardless of the underlying value of the enterprise, in our opinion. This held true as steady growth and momentum factors fared better than value. Despite the attractive valuations of many of the holdings in the Fund's portfolio, prices were decimated by the rapid sell off in the market. However, in the past when stock prices have collapsed rapidly and the spread between market price and our intrinsic value estimates for portfolio companies widens, these stocks tend to stabilize in the short run and meaningfully appreciate over the next twelve months.

Performance was hurt by some of our sector weightings. In a flight from risk, the utilities sector was the stand out performer for the index. We have been underweight this sector due to valuation concerns. Our positioning in the financial sector also hurt performance (underweight REIT's which performed relatively well and overweight regional banks which have underperformed). Our overweight to the benchmark in the producer durables sector also detracted from performance.

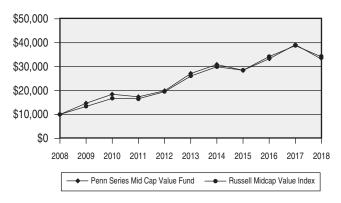
Individual stocks that had disappointing earnings and/or financial reports were severely punished by the market and in many cases declined much more than our analysts had projected and fundamentals warranted, in our opinion. Perrigo, which is undergoing a restructuring led by a new CEO, announced that the Irish tax authority filed a \$1.9 billion tax assessment against the company. While Perrigo will appeal this decision, the stock lost over 25% of its value in one trading day. Hain Celestial underperformed as the near term outlook was reduced due to cost increases which pressured margins. Hain's new CEO is in the process of preparing a restructuring plan for this asset rich company. Western Digital and AerCap also came under unrelenting selling pressure.

While the negative news around stocks was pervasive, several of our companies delivered very strong performance. In the consumer discretionary sector, both SeaWorld Entertainment and Macy's rebounded from overly depressed levels. Esterline Technologies and Envision Healthcare were acquired at significant premiums to our cost. We anticipate M&A activity in our portfolio to continue to be robust next year, especially if valuation levels remain low.

We believe 2019 will bring tighter financial conditions, resulting in a meaningful slowdown in both GDP and profit growth. Corporate profit margins could be pressured by rising interest rates, higher tariffs, and accelerating wage growth. As a result, we believe earnings estimates are likely to come down from recent estimates. The equity markets have discounted this slowdown with the most economically sensitive areas (i.e., consumer discretionary, housing, industrials, technology, financials) getting slammed in the recent market turmoil. Based on a reasonable estimate of earnings for 2019, the market P/E ratio is now below 14x, a much more reasonable level than at the beginning of 2018. With the recent dislocation in the markets, we believe the Fund is poised for a bounce back in 2019 and improved investment returns over the next few years.

Penn Mutual Asset Management, LLC Investment Adviser Neuberger Berman Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Mid Cap Value Fund on December 31, 2008 would have grown to \$33,187. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell Midcap Value Index, during the same period. A \$10,000 investment in the Russell Midcap Value Index on December 31, 2008 would have grown to \$34,038.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year 5 Year	r 10 Year
Mid Cap Value Fund	(15.20%) 4.07	7% 12.74%
Russell MidCap Value Index	(12.29%) 5.44	13.03%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Industrials	19.5%
Consumer, Cyclical	18.0%
Consumer, Non-cyclical	15.1%
Financial	13.8%
Technology	12.0%
Energy	7.5%
Communications	6.4%
Utilities	4.3%
Basic Materials	3.4%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

## **Management's Discussion of Fund Performance**

### Mid Core Value Fund

The Penn Series Mid Core Value Fund returned -13.05% for the twelve-month period ending December 31, 2018, compared to the -12.29% return for its benchmark, the Russell Midcap Value Index for the same time period.

The U.S. equity market suffered heightened volatility in 2018 as concerns about slowing global economic and earnings growth, falling oil prices, less accommodative monetary policy, trade tensions, and a partial U.S. government shutdown triggered a sharp fourth quarter decline in stock prices. As a result, most market indices ended the calendar year lower.

Stock selection and an underweight in real estate detracted. Weyerhaeuser was a notable detractor. This timber REIT fell considerably in the fourth quarter due to declines in timber pricing, driven in part by a lower construction outlook and worries regarding export trade.

Stock selection in energy also weighed on relative performance as several of the portfolio's energy stocks declined along with crude oil prices. Individual detractors included Cimarex Energy, an oil and gas exploration company, and EQT, a natural gas and pipeline company. An overweight in energy also weakened relative performance.

Stock selection and an underweight in consumer discretionary aided relative performance. Stock selection was especially favorable in specialty retail, where Advance Auto Parts was a top contributor.

Several of the portfolio's health care positions assisted relative performance, especially in the health care providers and services industry, where LifePoint Health was a notable contributor.

Asset managers trailed the market during much of the year as relative valuations compressed. Invesco lost both a large sovereign wealth mandate and large subadvisory role. Lower fee rates reduced Invesco's earnings estimates and magnified its underperformance. News that Invesco is acquiring Oppenheimer Funds also weighed on the stock price. We trimmed our position.

Paper and packaging company WestRock was a prominent detractor. The stock underperformed due to worries that containerboard pricing and demand have peaked. The company's decision to acquire a smaller competitor also raised worries over its debt load. The stock was downgraded in the fourth quarter, due in part to broader cyclical concerns for the overall containerboard market.

The stock of Cimarex Energy, a higher-quality energy exploration and production company, underperformed early in the year due to fiscal 2018 production guidance that came in below expectations. Investors were also concerned over the quality of its midcontinent assets after competitors posted uninspiring results in the basin during recent quarters. In the fourth quarter, weakness in crude oil and natural gas prices pressured the stock.

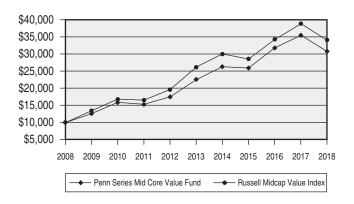
Advance Auto Parts, a retailer of aftermarket replacement parts, is a market share leader in a higher-quality industry. It reported several quarters of strong results and raised its full-year guidance due to margin improvement and stronger than expected same-store sales trends. This news indicated to investors that the company's turnaround plan is starting to show signs of effectiveness.

The stock of LifePoint Health outperformed on news that it would be acquired for a significant premium by Apollo Global Management, a private equity firm. This was a cash offer, and our expectation was that there would not be any other buyers. We took our profits on the stock and exited the position in October.

The stock for Keysight Technologies, an electronic test and measurement company, rose through the first three quarters of the year, lifted by its success in serving growth markets such as 5G, next-generation wireless, aerospace, and automotive. We sold the stock on strength.

Penn Mutual Asset Management, LLC Investment Adviser American Century Investment Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Mid Core Value Fund on December 31, 2008 would have grown to \$30,765. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell Midcap Value Index, during the same period. A \$10,000 investment in the Russell Midcap Value Index on December 31, 2008 would have grown to \$34,038.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Mid Core Value Fund	(13.05%)	6.42%	11.89%
Russell MidCap Value Index	(12.29%)	5.44%	13.03%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Financial	29.1%
Industrial	19.2%
Consumer, Non-cyclical	16.5%
Consumer, Cyclical	11.8%
Utilities	9.2%
Energy	8.1%
Technology	6.1%
	<u>100.0</u> %

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **SMID Cap Growth Fund**

The Penn Series SMID Cap Growth Fund returned –5.50% for the twelve-month period ending December 31, 2018, compared to the –7.47% return for its benchmark, the Russell 2500 Growth Index for the same time period.

During 2018, the Penn Series Funds SMID Cap Growth Fund outperformed the Russell 2500 Growth Index. In the 12-month period, stock selection in the Consumer Discretionary and Health Care sectors contributed to results, while stock selection in the Industrials and Materials sectors detracted from performance.

ABIOMED, Inc. was a top contributor to returns during the year. The company engages in the research, development and sale of medical devices to assist or replace the pumping function of the failing heart. The company's shares rallied following a positive earnings release in April 2018, in which revenues were up significantly from the prior year. It was also announced later in the second quarter that ABIOMED would be added to the S&P 500 Index, illustrating its continued competitive position within the market. We remain positive on the company, as we believe its differentiated technology in the heart pump market positions it well as hospital purchasing is shifting to devices that improve patient outcome and reduce hospital stays. Additionally, we believe that the company will have a dominant position in a market that is still in the early innings of penetration. Wingstop, Inc., a restaurant franchisor and operator of cooked-to-order chicken wings, was also a top contributor to returns during the year. Both in May and August, shares of the company rallied after reporting solid quarterly earnings, in which Wingstop exceeded both revenue and earnings estimates. This was viewed positively by investors, as it appears that increased brand awareness has led to impressive sales growth. We believe that Wingstop's investments in national advertising will continue to improve its brand awareness and ultimately act as a catalyst for further sales and earnings growth. We also believe that increased new store development and the implementation of delivery in its restaurants positioned it well to capitalize on increased demand as awareness grows.

Construction materials company Summit Materials, Inc. was a top detractor from returns during the year. In early August 2018, the stock fell sharply following the company's quarterly earnings release. Despite beating market expectations on revenue, the company fell short of expectations on earnings per share by a significant margin.

These disappointing results were largely due to difficult, but transitory weather conditions. Going forward, we are positive on the growth potential for the company given the backlog of public construction work available. We further feel that Summit Materials could have stable earnings power moving forward and are confident in management's ability to execute on the company's strategic plans. Asset management company, Affiliated Managers Group, Inc. was also a top detractor from results during the period. The stock came under pressure following its first quarter results in which it reported strong sales and earnings growth, but net asset flows fell short of investor expectations. The negative flows were driven by the institutional channel, but were partially offset by its retail and high net-worth channel, which we believe leads to a better fee mix. It's shares also sold off in late May following the announcement that the company's Chief Executive Officer would be stepping down due to health issues. Despite the volatility experienced during the year, we continue to believe Affiliated Managers Group is a highquality growth company with an attractive cost structure. We also view the company positively as it continues to return capital to its shareholders.

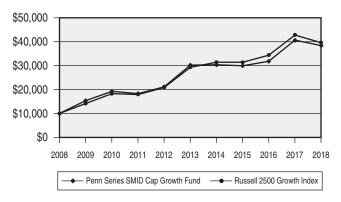
Heading into 2019, we continue to view equities as the most favorable asset class, offering the most attractive valuations relative to macro and corporate fundamentals. Asset prices and market expectations have adjusted significantly lower versus a year ago, offering a more attractive entry point and creating the potential for positive surprises. We expect to see more signs of an aging cycle in 2019, which may be challenging to navigate and require more selectivity by investors. Yet without clearer signs of deteriorating fundamentals, we think it is too early to position for a downturn in global growth or corporate earnings.

Increasing global uncertainties, trade tensions and changing monetary policy created more volatility in equity markets, especially during the fourth quarter. Given this backdrop, we believe a thorough understanding of both market and company specific variables is crucial to navigating the ever-changing investment landscape. As active managers, we are closely monitoring these developments and the ramifications they could have across our portfolios. We feel these factors could provide a favorable environment for active management and believe that our time-tested approach of bottom-up stock picking has the potential to deliver strong relative returns.

## **Management's Discussion of Fund Performance**

Penn Mutual Asset Management, LLC Investment Adviser Goldman Sachs Asset Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the SMID Cap Growth Fund on December 31, 2008 would have grown to \$38,354. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 2500 Growth Index, during the same period. A \$10,000 investment in the Russell 2500 Growth Index on December 31, 2008 would have grown to \$39,626.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
SMID Cap Growth Fund	(5.50%)	4.89%	14.39%
Russell 2500 Growth Index	(7.47%)	6.19%	14.76%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Consumer, Non-cyclical	36.1%
Technology	18.4%
Industrial	14.4%
Consumer, Cyclical	11.2%
Financial	10.0%
Communications	7.9%
Basic Materials	1.2%
Energy	0.8%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **SMID Cap Value Fund**

The Penn Series SMID Cap Value Fund returned –15.16% for the twelve-month period ending December 31, 2018, compared to the –12.36% return for its benchmark, the Russell 2500 Value Index for the same time period.

Global equities ended the twelve month period ended December 31, 2018 in negative territory, marking one of the worst years for the stock market in a decade in terms of performance. Despite a relatively strong start to the year and US stock indices reaching record highs, volatility spiked toward the end of the period. Investors worried about the outlook for corporate earnings growth amid a more challenging global growth environment and as the benefits of tax reform roll off. The US Federal Reserve (Fed) raised rates four times during the period, as expected, but softened its tone in December and signaled that it might slow its pace of rate hikes in 2019. In the US, growth stocks outperformed value stocks, in terms of style, and large-cap stocks outperformed their small-cap peers. For the year, the portfolio declined in absolute terms and underperformed its benchmark, the Russell 2500 Value Index, which declined 12.36%. Overall stock selection detracted for the period, primarily owing to holdings in the consumer discretionary, financials and industrials sectors. An underweight position in utilities and overweight position in energy also detracted. An overweight position and stock selection in the technology sector contributed, as did stock selection in healthcare and real estate.

Performance detractors included Cooper Standard, a global auto-parts supplier. Cooper's shares traded down after management meaningfully reduced revenue and profit guidance. The company's outlook was negatively impacted by a slowdown in Chinese and European auto sales, as well as by cost pressures from both rising input costs and trade tariffs. Texas Capital Bancshares, a Dallasbased regional bank, also underperformed. The bank reported weaker-than-expected earnings due to slowing loan growth and rising deposit costs, the result of increased competition. Shares of aluminum producer Alcoa detracted amid tariff and broader global supply concerns.

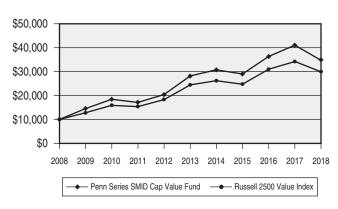
Many contributors, including Mellanox Technologies and Finisar, benefited from strong company specific catalysts. Mellanox, a supplier of high-speed storage and network connectivity computer chips, rose after the company delivered stronger-than-expected earnings. Mellanox surpassed growth expectations for its new ethernet products and significantly expanded its profit margins

through internal cost-containment efforts. Finisar, a manufacturer of components used in data centers and telecom infrastructure, announced that it had reached a deal to be acquired at a significant premium by one of its competitors. Molina Healthcare, a managed-care company providing healthcare services for Medicaid, contributed as shares rose sharply after it reported significantly better-than-expected profitability.

As we enter 2019, investors are faced with a world that is sharply different from just one year ago. The economy is still supported by the solid foundation of strong employment and high capacity utilization. Vulnerability began to emerge in 2018, however, as the impact of the Fed rate hikes and trade frictions sapped confidence. Markets reacted to the increased fragility of the economy by selling risk assets and creating a significant opportunity in value stocks. We share some of the market's concerns about the health of the economy. Many companies, however, enter this period of heightened risk on sounder footing relative to a decade ago. These fundamental improvements will not make them immune to the cycle but will lessen its impact and provide options for them to emerge stronger at the end of any potential future slowdown or recession. These companies are not isolated to a particular set of sectors or industries. The size and breadth of this opportunity make it fertile ground for active managers. Selectivity will remain critical nonetheless. Not every company will emerge from a possible pullback unscathed. Focusing on the companies with the best competitive positions, strongest balance sheets and cash flow will be more crucial than ever.

Penn Mutual Asset Management, LLC Investment Adviser AllianceBernstein Investment Sub-Adviser

## Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the SMID Cap Value Fund on December 31, 2008 would have grown to \$34,809. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 2500 Value Index, during the same period. A \$10,000 investment in the Russell 2500 Value Index on December 31, 2008 would have grown to \$30,008.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
SMID Cap Value Fund	(15.16%)	4.34%	13.28%
Russell 2500 Value Index	(12.36%)	4.16%	11.62%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Financial	33.8%
Consumer, Cyclical	13.0%
Consumer, Non-cyclical	11.8%
Industrial	11.6%
Technology	11.1%
Energy	7.1%
Utilities	5.7%
Communications	4.1%
Basic Materials	1.8%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Small Cap Growth Fund**

The Penn Series Small Cap Growth Fund returned –4.64% for the twelve-month period ending December 31, 2018, compared to the –9.31% return for its benchmark, the Russell 2000 Growth Index for the same time period.

Small-cap stocks were volatile and lost ground during the year. While corporate earnings growth was solid, global trade tensions and the prospect of rising interest rates weighed on stocks. In the fourth quarter, markets fell sharply as trade tensions between the U.S. and China escalated and data suggested weaker international economic growth.

For the 12 months ended December 31, 2018, the Portfolio outperformed its benchmark, the Russell 2000 Growth Index. Stock selection in the industrials sector was a large driver of relative outperformance, as was our overweight to the technology sector.

HEICO was our largest contributor within the industrials sector. Strong earnings momentum helped boost the stock of the aerospace parts supplier during the period. A few bolt-on acquisitions made by the company have also been viewed favorably and helped drive the stock. Looking ahead, we continue to like HEICO's aftermarket business, which provides a resilient, recurring revenue stream for the company. We also believe the technical expertise required to make its mission-critical parts, as well as the FAA approval process required for each part, present a high barrier to entry for would-be competitors.

Both stock selection in the energy sector and an underweight to the sector also contributed to relative performance. Within the energy sector, we did not have exposure to many of the exploration and production companies within the index. That lack of exposure helped relative performance as shares of such companies dropped considerably when oil prices sank during the year.

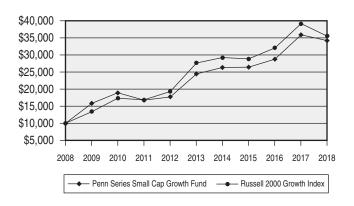
On an absolute basis, our top contributor to performance was The Trade Desk. The stock was up significantly after its quarterly earnings handily beat market expectations in consecutive quarters. We believe The Trade Desk is still in the early days of growing its business, as it works with large companies and advertising agencies to help them deploy digital advertising spending across channels in a more cost-effective way.

While we outperformed the benchmark, stock selection in the consumer staples, communication services and materials sectors detracted from relative results. On an absolute basis, Belden was our largest detractor. Industrial-related stocks such as Belden sold off broadly in the period due to concerns about slowing economic growth. Belden's stock dipped further after an announcement the SEC was investigating the company over how it recognized revenue in one business unit. The company had already announced the accounting issue, however, and we believe the stock price reaction to the news about the SEC investigation was overdone. We continue to hold the stock, and believe connector and component suppliers such as Belden serve attractive end markets that are growing content in a number of industrial products.

Puma Biotechnology was another detractor. The stock declined after the company announced it was unlikely to get approval from the European Medicines Agency (EMA) for its lead drug, Nerlynx. The stock continued to trend down as the U.S. launch has ramped slower than expected. We still like the long-term growth potential of Nerlynx, a breast cancer therapy approved by the U.S. Food and Drug Administration in 2017, and subsequently approved in Europe in mid-2018 after the EMA decision was reversed. We think the stock's current valuation doesn't reflect the upside in the U.S market, let alone in Europe.

Penn Mutual Asset Management, LLC Investment Adviser Janus Capital Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Small Cap Growth Fund on December 31, 2008 would have grown to \$34,228. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 2000 Growth Index, during the same period. A \$10,000 investment in the Russell 2000 Growth Index on December 31, 2008 would have grown to \$35,547.

#### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Small Cap Growth Fund	(4.64%)	6.97%	13.09%
Russell 2000 Growth Index	(9.31%)	5.13%	13.52%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

	Percent of Total Investments <sup>1</sup>
Consumer, Non-cyclical	34.3%
Technology	20.1%
Industrial	20.0%
Consumer, Cyclical	8.7%
Financial	6.7%
Communications	5.8%
Basic Materials	3.7%
Energy	0.7%
Total	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Small Cap Value Fund**

The Penn Series Small Cap Value Fund returned –13.88% for the twelve-month period ending December 31, 2018, compared to the –12.86% return for its benchmark, the Russell 2000 Value Index for the same time period.

Despite a strong start to the year amid solid economic data, a \$1.5 trillion tax reform plan and a favorable earning season, U.S. equities endured a challenging and volatile year. The Federal Reserve Board (Fed) raised interest rates four times over the year and communicated an upbeat view of the economic outlook, spurred by strong U.S. labor and inflation data. Against the strong fundamentals, escalating trade tensions, fears of a global economic slowdown and populist politics weighed on investor sentiment throughout the year. U.S. equities fell sharply in the fourth quarter as investor sentiment rapidly deteriorated given escalating trade and political uncertainty and in a delayed response to an earlier selloff in global rates. The correction resulted in tighter U.S. financial conditions, which had been resilient to Fed rate hikes earlier in the year. U.S. equities saw a temporary reprieve in November due to more accommodative comments from Fed Chair Jerome Powell and encouraging progress towards China-U.S. trade talks. However, the recovery was short-lived as U.S. equities plunged in December given renewed investor fears sparked by the arrest of a Chinese technology executive, a partial U.S. federal government shutdown and President Trump's criticism of Fed Chair Powell. The best performing sectors over the year were Health Care, Utilities and Information Technology, while the worst performing sectors were Energy, Materials and Industrials. Overall, small-cap equities underperformed the broader market, with the Russell Index returning –11.01% while the S&P 500 Index fell 4.38%.

During the year, the portfolio underperformed the Russell 2000 Value Index. A majority of underperformance occurred in the second quarter when there was an exuberant small-cap rally. In contrast, the strategy outperformed the benchmark during the other three quarters of the year. In the portfolio, stock selection within the Information Technology and Real Estate sectors contributed to performance, while investments in the Industrials and Consumer Discretionary sectors detracted from returns.

For the fourth quarter and entire year, Burlington Stores, Inc., a major off-price clothing retailer in the U.S., was a top contributor to returns. The company has continually

reported solid earnings and has exhibited substantial store productivity, with an increase to same store sales, while also upgrading and opening stores in high traffic centers. This has translated into high mid-digit sales growth and earnings margin expansion. We believe that Burlington Stores will further expand margins into 2019, aided by strong top-line sales, as it continues to enhance underpenetrated categories such as home, beauty, toy and baby. Beacon Roofing Supply, Inc., a company that distributes roofing and building materials in the U.S. and Canada, was a top detractor from performance for the year. During the first and second quarters, gross margins came under pressure as input costs increased, leading to a shortfall in earnings. While Beacon Roofing Supply was able to overcome cost headwinds in the third quarter, the company still missed expectations due to mild weather and a decline to organic sales in residential roofing. Going into 2019, we believe the company will have a more favorable set up and potential cost synergies from its Allied Building Products acquisition. We also have confidence in the company's experienced management team, who has been able to execute over multiple cycles and return value back to shareholders.

During the year, we initiated a position in ALLETE, Inc., a gas and electric, mostly regulated, utility. We like the business mix, where a majority of the cash flow is generated from a steady stream of regulated businesses supported by higher growth areas of energy and infrastructure, which we believe is sustainable for stable earnings and dividend growth.

We sold out of our position in Black Hills Corp., a pure-play electrical and gas utility focused in regulatory states. Relative to the opportunity set, we decided to upgrade the quality of the portfolio by selling Black Hills Corp. and deploying most of the proceeds into gas and electric utility, ALLETE, Inc.

Based on corporate health and margin expansion, especially given tax reform tailwinds, smaller-cap companies had robust earnings growth in 2018 and 2019 expectations, albeit more moderate, outpace other equities, such as U.S. large-cap and international markets. The U.S. economic backdrop remains healthy, with above trend GDP growth and a solid labor market as demonstrated by a low unemployment rate. Due to greater U.S. sourced revenues than large-caps, we believe that smaller-caps could capture this ongoing strength. While there has recently been more volatility in the markets, we believe that uncertain conditions call for an experienced active management team that can navigate the more complex environment.

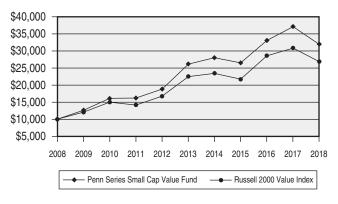
# Penn Series Funds, Inc.

## **Management's Discussion of Fund Performance**

Regardless of the market direction, our fundamental, bottom-up stock selection continues to drive our process, rather than headlines or sentiment. We maintain high conviction in the companies that we own and believe they have the potential to outperform relative to the broader market regardless of the growth environment. We continue to focus on undervalued companies that we believe are in control of their own future, such as innovators with differentiated products, companies with low-cost structures, or ones that have been investing in their own businesses and are poised to gain market share. We maintain our discipline in identifying companies with strong or improving balance sheets, led by quality management teams, trading at discounted valuations, and remain focused on the long-term outperformance of the portfolio.

Penn Mutual Asset Management, LLC Investment Adviser Goldman Sachs Asset Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Small Cap Value Fund on December 31, 2008 would have grown to \$31,992. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 2000 Value Index, during the same period. A \$10,000 investment in the Russell 2000 Value Index on December 31, 2008 would have grown to \$26,894.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Small Cap Value Fund	(13.88%)	4.09%	12.33%
Russell 2000 Value Index	(12.86%)	3.61%	10.40%

<sup>1</sup> The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

#### Portfolio Composition as of 12/31/18

	Percent of Total Investments <sup>1</sup>
Financial	41.0%
Industrial	12.3%
Consumer, Non-cyclical	10.1%
Consumer, Cyclical	9.6%
Technology	7.7%
Utilities	6.9%
Basic Materials	4.3%
Energy	4.2%
Communications	<u>3.9</u> %
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

### **Small Cap Index Fund**

The Penn Series Small Cap Index Fund returned –11.37% for the twelve-month period ending December 31, 2018, compared to the –11.01% return for its benchmark, the Russell 2000 Index for the same time period.

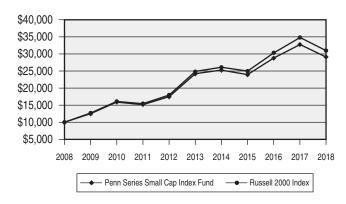
The Fund and Index returns reflect the reinvestment of dividends and other income. The Fund's performance reflects the expenses of managing the Fund, including brokerage and advisory expenses. The Index is unmanaged and Index returns do not reflect fees and expenses of any kind, which would have a negative impact on returns. Small security misweights, cash drag, futures exposure, as-of cash flows, and compounding contributed to the difference between the Fund's performance and that of the Index.

Futures exposure and security misweights were the primary drivers of Fund performance during the reporting period, contributing to –1 basis point and +24 basis points to the performance difference, respectively. The Fund used futures in order to gain market exposure for the cash position during the reporting period.

On an individual security level, the top positive contributors to the Fund's performance during the reporting period were Sarepta Therapeutics, Inc., AveXis, Inc. and GrubHub, Inc. The top negative contributors to the Fund's performance during the reporting period were McDermott International, Inc., Dana Incorporated and Clovis Oncology, Inc.

Penn Mutual Asset Management, LLC Investment Adviser State Street Global Advisors Investment Sub-Adviser

# Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Small Cap Index Fund on December 31, 2008 would have grown to \$29,109. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the Russell 2000 Index, during the same period. A \$10,000 investment in the Russell 2000 Index on December 31, 2008 would have grown to \$30,983.

	1 Year	5 Year	10 Year
Small Cap Index Fund	(11.37%)	3.72%	11.28%
Russell 2000 Index	(11.01%)	4.41%	11.97%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Portfolio Composition as of 12/31/18

	Percent of Total Investments <sup>1</sup>
Financial	25.1%
Consumer, Non-cyclical	21.7%
Industrial	13.3%
Consumer, Cyclical	12.8%
Technology	10.2%
Communications	6.3%
Utilities	3.7%
Energy	3.7%
Basic Materials	3.0%
Government	0.2%
	<u>100.0</u> %

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent broad industry sectors. Each industry sector consists of one or more specific industry classifications.

## **Developed International Index Fund**

The Penn Series Developed International Index Fund returned –14.07% for the twelve-month period ending December 31, 2018, compared to the –13.36% return for its benchmark, the MSCI EAFE Index for the same time period.

The Fund and Index returns reflect the reinvestment of dividends and other income. The Fund's performance does not reflect the expenses of managing the Fund, including brokerage and advisory expenses. The Index is unmanaged and Index returns do not reflect fees and expenses of any kind, which would have a negative impact on returns.

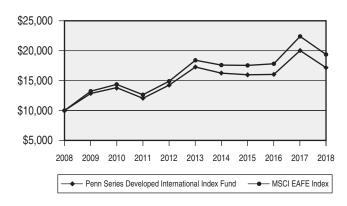
Dividend tax withholding differences, security misweights and as of cash flows were primary drivers of Fund performance during the reporting period, contributing +15.0 basis points, -1.0 basis points and -1.0 basis points to the performance difference, respectively.

The Fund used Futures in order to gain market exposure for the cash position during the reporting period. The Fund's use of futures detracted 0.4 basis points from Fund performance relative to the Index.

On an individual security level, the top positive contributors to the Fund's performance during the reporting period were GlaxoSmithKline plc, Sky Limited and CSL Limited. The top negative contributors to the Fund's performance during the Reporting Period were British American Tobacco plc, Bayer AG and BASF SE.

Penn Mutual Asset Management, LLC Investment Adviser State Street Global Advisors Investment Sub-Adviser

# Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Developed International Index Fund on December 31, 2008 would have grown to \$17,165. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the MSCI EAFE Index, during the same period. A \$10,000 investment in the MSCI EAFE Index on December 31, 2008 would have grown to \$19,331.

	1 Year	5 Year	10 Year
Developed International Index			
Fund	(14.07%)	(0.11%)	5.55%
MSCI EAFE Index	(13.36%)	1.00%	6.81%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Portfolio Composition as of 12/31/18

	Percent of Total Investments <sup>1</sup>
Japan	24.2%
United Kingdom	14.1%
France	10.3%
Switzerland	9.2%
Germany	8.8%
Australia	7.3%
Netherlands	5.9%
Hong Kong	3.5%
Spain	3.0%
Sweden	2.5%
Italy	2.0%
Denmark	1.8%
Singapore	1.5%
Finland	1.3%
Ireland	1.2%
Belgium	0.9%
Norway	0.7%
Israel	0.5%
Luxembourg	0.3%
Austria	0.2%
New Zealand	0.2%
Portugal	0.2%
China	0.1%
Jersey	0.1%
Bermuda	0.1%
Isle of Man	0.1%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent the countries in which the securities are denominated.

## Penn Series Funds, Inc.

# **Management's Discussion of Fund Performance**

## **International Equity Fund**

The Penn Series International Equity Fund returned -12.39% for the twelve-month period ending December 31, 2018, compared to the -13.78% return for its benchmark, the MSCI ACWI ex U.S. Index for the same time period.

Mastercard Inc., reported consistently strong results for the second quarter of 2018, with constant currency revenue growth in the mid-teens. Additionally, Mastercard reported its strongest purchase volume growth in recent years. Mastercard is a dominant card payment network second only to Visa. Mastercard continues to benefit from strong secular tailwinds (cash-to-card conversion), and enjoys durable competitive moats as an indispensable component of the payment ecosystem. We believe the company can meet its goal of becoming a one-stop shop for all types of payments.

Visa Inc., reported consistently strong results for the second quarter of 2018, with constant currency revenue growth in the mid-teens. Visa also increased its earnings guidance for 2018. Visa is a dominant card payment network that processes industry-leading global payment volumes outside of China. Visa has durable competitive moats as an indispensable component of the payment ecosystem and continues to benefit from strong secular tailwinds driven by cash-to-card conversion. Visa operates with a high barrier to entry as a result of scale-based network effects and duopolistic market structure, and consistently returns cash to shareholders in terms of buybacks and dividends, driven by strong ROIC and robust FCF conversion.

British American Tobacco was weak this year after uncertainty increased in the tobacco space as new nicotine delivery products were launched and the US FDA threatened increased regulations. We exited our position to reallocate capital to better opportunities.

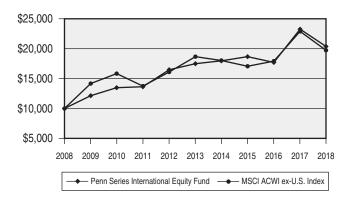
Anheuser-Busch Inbev (ABI), the world's largest brewer, reported weak third quarter 2018 results related to emerging market volatility and cut its dividend to help deleverage faster following the SAB acquisition. Emerging markets represent roughly 70% of ABI's business and Brazil, Argentina, and South Africa have been under pressure. We believe the weakness is temporary and emerging markets may offer ABI significant growth opportunities over the long term.

Developed and emerging markets both started 2018 with strong returns in January. However, after a sell-off in early February, volatility ensued and continued throughout 2018, as a host of geopolitical and macroeconomic risks, stemming from different corners of the earth, impacted markets. Previously swept by momentum, markets are now recognizing heightened risks. A number of factors weighed on international markets throughout 2018 and are continuing into 2019, including the prospect of rising interest rates, uncertainty around Brexit, anti-establishment parties gaining ground in Europe, volatile elections in Emerging Markets and the ongoing trade battle between China and the United States. Heading into 2019, further interest rate hikes in the United States, as well as the ECB dialing back its quantitative easing buying program, should continue to foster a return of a vast flow of savings from riskier assets and areas such as emerging markets back into countries that have run very low interest rates over the past decade, such as the United States and Europe.

As liquidity exits, risk pricing will notably increase and funding costs especially for weaker business models will rise. This combination of increased uncertainty and less liquidity could make for a challenging market in 2019. Importantly, long-term earnings outlook for our portfolio is solid. Even though absolute returns were down in 2018, the businesses in our portfolio continue to grow profits, which should be the ultimate determinate of stock prices. Additionally, international stocks are trading at a discount to the 15-year average and to the U.S. market. Therefore, despite the prevailing gloom-and-doom sentiment among investors, we are starting 2019 on an optimistic note.

Penn Mutual Asset Management, LLC Investment Adviser Vontobel Asset Management Investment Sub-Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the International Equity Fund on December 31, 2008 would have grown to \$20,426. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the MSCI ACWI ex-U.S. Index, during the same period. A \$10,000 investment in the MSCI ACWI ex-U.S. Index on December 31, 2008 would have grown to \$19,780.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
International Equity Fund	(12.39%)	3.13%	7.40%
MSCI ACWI ex-U.S. Index	(13.78%)	1.14%	7.06%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Portfolio Composition as of 12/31/18

	Percent of Total Investments <sup>1</sup>
United Kingdom	18.4%
France	12.1%
India	9.2%
Canada	8.6%
Netherlands	7.7%
United States	6.3%
Germany	6.2%
Switzerland	5.5%
Japan	4.5%
Ireland	4.1%
Spain	3.9%
China	3.5%
Singapore	2.1%
Hong Kong	1.7%
Taiwan	1.4%
Belgium	1.4%
Mexico	1.3%
Sweden	1.1%
Brazil	1.0%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent the countries in which the securities are denominated.

# **Emerging Markets Equity Fund**

The Penn Series Emerging Markets Equity Fund returned –17.46% for the twelve-month period ending December 31, 2018, compared to the –14.25% return for its benchmark, the MSCI Emerging Markets Index for the same time period.

Developed market equities outperformed emerging market equities in 2018, with the MSCI Emerging Markets Index returning -14.25% versus the MSCI World Index return of -8.71%. We think the U.S. economy is late cycle compared to the other large economies in the advanced world (euro Area, Japan) and emerging markets are early in their economic revival cycle. Valuations in the MSCI All Country World Index ex U.S. are much more attractive than they are in the U.S., where they are nearing all-time highs only surpassed by the 2001 tech bubble. Just as the 1980's belonged to Japan and the 2000's to emerging nations, the last decade belonged to America. But economies that are hot in one decade rarely stay hot in the next. Most booms eventually create excesses that sow the seeds of their own destruction, and the excesses that could end the American decade are coming into view. The stock market is now 50% larger than the American economy, a scale it has reached only twice in the past century, during the manias of the 1920's and late 1990's.

Over the past few years, investors became so focused on the tech-heavy Asian markets, they appeared to ignore the fundamentals of economic growth. Beginning with the launch of the MSCI EM Index in 1988, the best returns had come in the fastest growing economies, but after 2016 economies with the highest growth rates underperformed the EM index, and those with the lowest growth rates outperformed. Many of the outperformers were techheavy. As investors sell out of tech, they are rediscovering some overlooked markets of Eastern Europe and Latin America. Those markets had been battered in part by the strong dollar, which historically sucks money out of EM, but it may not last this time. Since the early 1980s, the dollar has rarely traded more than 15% above or below its long-term range, and it is now at the high end of that range. Dollar bear markets have tended to last around seven years. Our view is that the dollar's rise in 2018 is a temporary rally within the downtrend that began in early 2016 and could prove long-lasting.

The upshot is that many emerging markets look like compelling long-term buys. Many of the beaten down countries are well-insulated from crisis and are caught in an

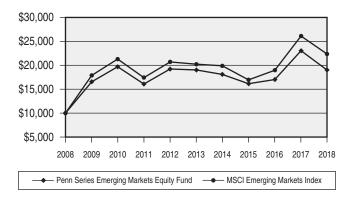
anti-bubble, gasping in a vacuum of attention because investors are focused on tech and tech-heavy markets like China. As a sense of normalcy returns to the markets, other sectors and countries are likely to pick up momentum. While trying to time the market is a fool's game, the time to make long-term investments is in periods like the current one, when stock prices in many high-growth emerging markets appear to be cheap for no good reason.

The entire EM class was in some sense overlooked even before the 2018 drawdown. As of last December, only about 4% to 6% of global equity investments were allocated to emerging markets, a share that is too low based on any of the three standard approaches to asset allocation. Basing investments on the EM weight in global equity markets would imply an allocation of 12%, using the EM share of global gross domestic product would imply an allocation of at least 15%, and using an optimal portfolio approach would suggest an allocation of 30%.

In our portfolio, we remain overweight in those countries where we believe economic growth is high or accelerating. We remain invested in good quality, growth-oriented companies capable of sustaining or expanding their earnings — and benefiting from healthy domestic demand, resistant to declines in global trade and resilient in the face of higher interest rates driven by the Federal Reserve's tightening regime.

Penn Mutual Asset Management, LLC Investment Adviser Morgan Stanley Investment Management Investment Sub-Adviser

Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Emerging Markets Equity Fund on December 31, 2008 would have grown to \$19,018. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the MSCI Emerging Markets Index, during the same period. A \$10,000 investment in the MSCI Emerging Markets Index on December 31, 2008 would have grown to \$22,378.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Emerging Markets Equity Fund	(17.46%)	(0.02%)	6.64%
MSCI Emerging Markets Index	(14.25%)	2.03%	8.39%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Portfolio Composition as of 12/31/18

	Percent of Total Investments <sup>1</sup>
China	17.4%
India	10.8%
Brazil	9.6%
Taiwan	9.0%
South Korea	7.0%
South Africa	6.2%
Mexico	5.2%
Indonesia	4.9%
Hong Kong	4.9%
Russia	4.3%
Poland	3.2%
Malaysia	3.0%
Peru	2.3%
Thailand	2.2%
Chile	2.0%
Hungary	1.8%
Philippines	1.5%
United States	1.0%
Portugal	1.0%
Germany	1.0%
Austria	0.7%
Egypt	0.7%
Argentina	0.3%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments. The categories shown represent the countries in which the securities are denominated.

### **Real Estate Securities Fund**

The Penn Series Real Estate Securities Fund returned -4.19% for the twelve-month period ending December 31, 2018, compared to the -4.62% return for its benchmark, the FTSE NAREIT Equity REIT Index for the same time period.

U.S. real estate stocks declined in a difficult year for equities broadly. REITs initially struggled amid an early-period spike in bond yields and concerns about fundamentals for retail and health care property landlords. REITs turned a corner in March as inflation remained generally benign, allowing bond yields to stabilize. Better-than-expected retail sales data added to positive sentiment, as did visible real estate merger and acquisition activity.

REIT returns reached their year-to-date highs of about 5% in late August, aided by continued U.S. job growth, reaccelerating economic activity, rising corporate profits and an 18-year high in consumer confidence. However, market conditions again turned challenging, reflecting a confluence of risk factors, including increased global trade tensions, slowing growth in China and Europe, and a sharp downturn in oil prices. Meanwhile, the U.S. Federal Reserve continued to raise short-term interest rates, and indicated that it would hike rates at least two more times in 2019. Combined, these developments greatly pressured broad equity markets in the final months of the period, including REITs, even as commercial real estate fundamentals remained generally healthy.

Returns in the period varied widely by property type. Data center REITs were a notable underperformer, down nearly 15% following two years of exceptionally strong performance. Regional mall and shopping center REITs also struggled, amid secular concerns over online retailers gaining market share from their tenants. Sentiment toward retail landlords was also hindered late in the year when Sears announced that it would file for bankruptcy and close more stores. Hotel and office owners had sizable declines as well. Health care property companies were a positive standout, favored for their relatively stable cash flows.

The Portfolio had a negative total return for the year, although it outperformed its benchmark. Factors that helped the portfolio's relative performance in the period included stock selection in the apartment sector, led by an overweight in UDR, Inc., which had a significant gain. The company continued to see occupancy improvements and management raised its guidance. Stock selection in the

self-storage sector also aided performance, due mainly to an overweight in Extra Space Storage that performed well. The portfolio's overweight in the manufactured home sector further helped relative performance; the group rose more than 10%, supported by firm demand and limited supply.

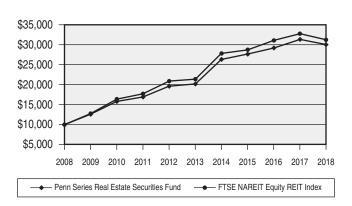
Stock selection in the shopping center sector detracted from relative performance. We held an overweight position in Urban Edge Properties, which was hindered in part by its relatively high exposure to big-box retailer store closures. Stock selection in the hotel sector hampered performance as well, mainly reflecting an out-of-index allocation to Red Rock Resorts. The stock was pressured by softer tourism and gaming revenues on the Las Vegas strip; however, Red Rock's customer base is mainly local and the company is thriving due to strong population and employment growth. Our underweight in the free-standing retail sector also detracted from relative performance.

In our view, real estate stocks in general are attractively positioned in a late-cycle environment. As the broad equities market adjusts to an environment of peak earnings margins and decelerating growth, REITs with defensive, contractually based growth characteristics are projected to maintain a positive earnings outlook that is largely unchanged.

In terms of sector positioning, we have a positive view on nearly all forms of rental housing due to favorable demographic growth trends, job and wage growth, and rising mortgage rates that are making home ownership more expensive. We also favor cell towers and data centers, which should continue to benefit from the proliferation of data growth in the U.S. and elsewhere.

Penn Mutual Asset Management, LLC Investment Adviser Cohen & Steers Capital Management Investment Sub-Adviser

# Cumulative Performance Comparison December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Real Estate Securities Fund on December 31, 2008 would have grown to \$30,161. For the purpose of comparison, the graph also shows the change in the Fund's benchmark, the FTSE NAREIT Equity REIT Index, during the same period. A \$10,000 investment in the FTSE NAREIT Equity REIT Index on December 31, 2008 would have grown to \$31,382.

### Average Annual Total Returns<sup>1</sup> as of 12/31/18

	1 Year	5 Year	10 Year
Real Estate Securities Fund	(4.19%)	8.26%	11.67%
FTSE NAREIT Equity REIT Index	(4.62%)	7.90%	12.12%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Portfolio Composition as of 12/31/18

	Percent of Total Investments <sup>1</sup>
Apartments	18.4%
Storage & Warehousing	13.1%
Office Property	12.1%
Healthcare	12.0%
Diversified	10.1%
Hotels & Resorts	8.1%
Industrial	6.8%
Strip Centers	5.4%
Telecommunications	4.5%
Manufactured Homes	4.4%
Building & Real Estate	3.2%
Regional Malls	1.1%
Entertainment	0.8%
	100.0%

Portfolio holdings are presented as a percentage of total investments before short-term investments.

## **Aggressive Allocation Fund**

The Penn Series Aggressive Allocation Fund returned –9.53% for the twelve-month period ending December 31, 2018, compared to its benchmarks, the Russell 3000 Index's return of –5.24% and the Bloomberg Barclays Capital U.S. Aggregate Bond Index's return of 0.01% for the same time period.

The Aggressive Allocation Fund is comprised of a target allocation of 90% equity funds and 10% fixed income funds. The equity allocation of the Fund is comprised of domestic equity funds ranging from large capitalization funds to small capitalization funds as well as developed international and emerging markets equity funds and the fixed income portion is primarily allocated to intermediate-term and short-term bond funds.

During the year of 2018, the Aggressive Allocation Fund underperformed its 90% stock/10% bond performance benchmark by 4.92%.

The asset allocation of the Aggressive Allocation Fund contributed negatively to its performance. During the period, the Fund's allocation to value and small cap growth equities underperformed the Russell 3000 Index. In 2018, international equities significantly underperformed due to the divergence of economic growth between the U.S. and the rest of the world. The allocation in large cap growth equities, mid cap growth equities and REITs generated positive asset allocation performance. On the fixed income side, allocation to short-term bonds contributed positively, while the allocation to high yield bonds contributed negatively to performance.

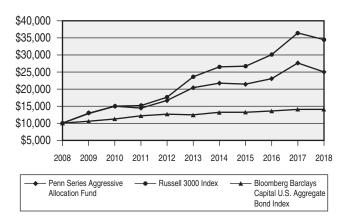
Fund selection of Aggressive Allocation Fund contributed positively to its performance. During the period, our managers for Penn Series Flexibly Managed Fund, Penn Series Large Cap Growth Fund, Penn Series Mid Cap Growth Fund and Penn Series Small Cap Growth Fund outperformed their respective benchmarks by more than 2%. Penn Series Mid Cap Value Fund, Penn Series SMID Cap Value Fund and Penn Series Emerging Markets Equity Fund underperformed their respective benchmarks by more than 2%. On the fixed income side, Penn Series High Yield Bond Fund outperformed; Quality Bond Fund and Limited Maturity Bond Fund underperformed their respective benchmarks.

Looking ahead, U.S. economic growth is projected to decelerate in 2019. We will also be facing potential headwinds from restrictive monetary and trading policies. Going forward, we will continually review the Fund to help

ensure that it remains consistent with its investment objective by making adjustments, when necessary.

Penn Mutual Asset Management, LLC Investment Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Aggressive Allocation Fund on December 31, 2008 would have grown to \$24,996. For the purpose of comparison, the graph also shows the change in the Fund's benchmarks, the Russell 3000 Index and the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the Russell 3000 Index on December 31, 2008 would have grown to \$34,495. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

	1 Year	5 Year	10 Year
Aggressive Allocation Fund	(9.53%)	4.17%	9.59%
Russell 3000 Index	(5.24%)	7.91%	13.18%
Bloomberg Barclays Capital U.S.			
Aggregate Bond Index	0.01%	2.52%	3.48%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Asset Allocation Target as of 12/31/18

International Stocks	22.0%
Large Cap Value Stocks	19.0%
Mid Cap Value Stocks	14.0%
Emerging Markets Stocks	11.0%
Small Cap Value Stocks	7.0%
Short Term Bonds	7.0%
Large Cap Growth Stocks	6.0%
Small Cap Growth Stocks	5.0%
Domestic REITs	3.0%
Mid Cap Growth Stocks	3.0%
High Yield Bonds	2.0%
Intermediate Bonds	1.0%
	100.0%

## Penn Series Funds, Inc.

## **Management's Discussion of Fund Performance**

## **Moderately Aggressive Allocation Fund**

The Penn Series Moderately Aggressive Allocation Fund returned –7.83% for the twelve-month period ending December 31, 2018, compared to its benchmarks, the Russell 3000 Index's return of –5.24% and the Bloomberg Barclays Capital U.S. Aggregate Bond Index's return of 0.01% for the same time period.

The Moderately Aggressive Allocation Fund is comprised of a target allocation of 80% equity funds and 20% fixed income funds. The equity allocation of the Fund is comprised of domestic equity funds ranging from large capitalization funds to small capitalization funds as well as developed international and emerging markets equity funds and the fixed income portion is primarily allocated to intermediate-term and short-term bond funds.

During the year of 2018, Moderately Aggressive Allocation Fund underperformed its 80% stock/20% bond benchmark by 3.82%.

The asset allocation of the Moderately Aggressive Allocation Fund contributed negatively to its performance. During the period, the Fund's allocation to value and small cap growth equities underperformed the Russell 3000 Index. In 2018, international equities significantly underperformed due to the divergence of economic growth between the U.S. and the rest of the world. The allocation in large cap growth equities, mid cap growth equities and REITs generated positive asset allocation performance. On the fixed income side, allocation to short-term bonds contributed positively, while the allocation to high yield bonds contributed negatively to performance.

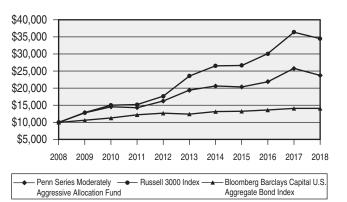
Fund selection of the Moderately Aggressive Allocation Fund contributed positively to its performance. During the period, our managers for Penn Series Flexibly Managed Fund, Penn Series Large Cap Growth Fund, Penn Series Mid Cap Growth Fund and Penn Series Small Cap Growth Fund outperformed their respective benchmarks by more than 2%. Penn Series Mid Cap Value Fund, Penn Series SMID Cap Value Fund and Penn Series Emerging Markets Equity Fund underperformed their respective benchmarks by more than 2%. On the fixed income side, Penn Series High Yield Bond Fund outperformed; Quality Bond Fund and Limited Maturity Bond Fund underperformed their respective benchmarks.

Looking ahead, U.S. economic growth is projected to decelerate in 2019. We will also be facing potential headwinds from restrictive monetary and trading policies.

Going forward, we will continually review the Fund to help ensure that it remains consistent with its investment objective by making adjustments, when necessary.

Penn Mutual Asset Management, LLC Investment Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Moderately Aggressive Allocation Fund on December 31, 2008 would have grown to \$23,723. For the purpose of comparison, the graph also shows the change in the Fund's benchmarks, the Russell 3000 Index and the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the Russell 3000 Index on December 31, 2008 would have grown to \$34,495. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

	1 Year	5 Year	10 Year
Moderately Aggressive Allocation			
Fund	(7.83%)	4.13%	9.02%
Russell 3000 Index	(5.24%)	7.91%	13.18%
Bloomberg Barclays Capital U.S.			
Aggregate Bond Index	0.01%	2.52%	3.48%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Asset Allocation Target as of 12/31/18

20.0%
17.0%
11.0%
11.0%
8.0%
7.0%
7.0%
7.0%
4.0%
3.0%
3.0%
2.0%
100.0%

# Penn Series Funds, Inc.

# **Management's Discussion of Fund Performance**

### Moderate Allocation Fund

The Penn Series Moderate Allocation Fund returned -5.88% for the twelve-month period ending December 31, 2018, compared to its benchmarks, the Russell 3000 Index's return of -5.24% and the Bloomberg Barclays Capital U.S. Aggregate Bond Index's return of 0.01% for the same time period.

The Moderate Allocation Fund is comprised of a target allocation of 60% equity funds and 40% fixed income funds. The equity allocation of the Fund is comprised of domestic equity funds ranging from large capitalization funds to small capitalization funds as well as developed international and emerging markets equity funds and the fixed income portion is primarily allocated to intermediate-term and short-term bond funds.

During the year of 2018, the Moderate Allocation Fund underperformed its 60% stock/40% bond performance benchmark by 3.02%.

The asset allocation of the Moderately Allocation Fund contributed negatively to its performance. During the period, the Fund's allocation to value and small cap growth equities underperformed the Russell 3000 Index. In 2018, international equities significantly underperformed due to the divergence of economic growth between the U.S. and the rest of the world. The allocation in large cap growth equities, mid cap growth equities and REITs generated positive asset allocation performance. On the fixed income side, allocation to short-term bonds contributed positively, while the allocation to high yield bonds contributed negatively to performance.

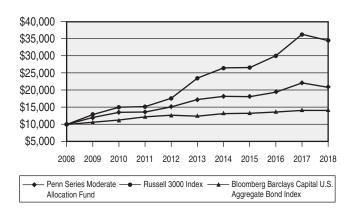
Fund selection of the Moderately Allocation Fund contributed positively to its performance. During the period, our managers for Penn Series Flexibly Managed Fund, Penn Series Large Cap Growth Fund, Penn Series Mid Cap Growth Fund and Penn Series Small Cap Growth Fund outperformed their respective benchmarks by more than 2%. Penn Series Mid Cap Value Fund, Penn Series SMID Cap Value Fund and Penn Series Emerging Markets Equity Fund underperformed their respective benchmarks by more than 2%. On the fixed income side, Penn Series High Yield Bond Fund outperformed; Quality Bond Fund and Limited Maturity Bond Fund underperformed their respective benchmarks.

Looking ahead, U.S. economic growth is projected to decelerate in 2019. We will also be facing potential headwinds from restrictive monetary and trading policies.

Going forward, we will continually review the Fund to help ensure that it remains consistent with its investment objective by making adjustments, when necessary.

Penn Mutual Asset Management, LLC Investment Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Moderate Allocation Fund on December 31, 2008 would have grown to \$20,786. For the purpose of comparison, the graph also shows the change in the Fund's benchmarks, the Russell 3000 Index and the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the Russell 3000 Index on December 31, 2008 would have grown to \$34,495. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

	1 Year 5 Year	10 Year
Moderate Allocation Fund	(5.88%) 3.81%	7.59%
Russell 3000 Index	(5.24%) 7.91%	13.18%
Bloomberg Barclays Capital U.S.		
Aggregate Bond Index	0.01% 2.52%	3.48%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Asset Allocation Target as of 12/31/18

Intermediate Bonds	22.0%
Short Term Bonds	15.0%
Large Cap Value Stocks	14.0%
International Stocks	12.0%
Mid Cap Value Stocks	10.0%
Large Cap Growth Stocks	6.0%
Small Cap Value Stocks	6.0%
Emerging Markets Stocks	5.0%
High Yield Bonds	3.0%
Small Cap Growth Stocks	3.0%
Mid Cap Growth Stocks	2.0%
Domestic REITs	2.0%
	100.0%

## Penn Series Funds, Inc.

## **Management's Discussion of Fund Performance**

## **Moderately Conservative Allocation Fund**

The Penn Series Moderately Conservative Allocation Fund returned –3.47% for the twelve-month period ending December 31, 2018, compared to its benchmarks, the Russell 3000 Index's return of –5.24% and the Bloomberg Barclays Capital U.S. Aggregate Bond Index's return of 0.01% for the same time period.

The Moderately Conservative Allocation Fund is comprised of a target allocation of 40% equity funds and 60% fixed income funds. The equity allocation of the Fund is comprised of domestic equity funds ranging from large capitalization funds to small capitalization funds as well as developed international and emerging markets equity funds and the fixed income portion is primarily allocated to intermediate-term and short-term bond funds.

During the year of 2018, the Moderately Conservative Allocation Fund underperformed its 40% stock/60% bond performance benchmark by 1.65%.

The asset allocation of the Moderately Conservative Allocation Fund contributed negatively to its performance. During the period, the Fund's allocation to value and small cap growth equities underperformed the Russell 3000 Index. In 2018, international equities significantly underperformed due to the divergence of economic growth between the U.S. and the rest of the world. The allocation in large cap growth equities and REITs generated positive asset allocation performance. On the fixed income side, allocation to short-term bonds contributed positively, while the allocation to high yield bonds contributed negatively to performance.

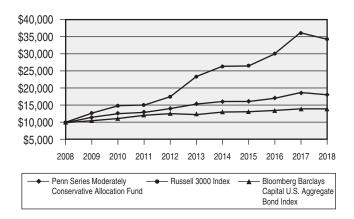
Fund selection of the Moderately Conservative Allocation Fund contributed positively to its performance. During the period, our managers for Penn Series Flexibly Managed Fund, Penn Series Large Cap Growth Fund, Penn Series Large Core Value Fund and Penn Series International Equity Fund outperformed their respective benchmarks by more than 1%. Penn Series Mid Cap Value Fund, Penn Series SMID Cap Value Fund, Penn Series Small Cap Value Fund and Penn Series Emerging Markets Equity Fund underperformed their respective benchmarks by more than 1%. On the fixed income side, Penn Series High Yield Bond Fund outperformed; Quality Bond Fund and Limited Maturity Bond Fund underperformed their respective benchmarks.

Looking ahead, U.S. economic growth is projected to decelerate in 2019. We will also be facing potential

headwinds from restrictive monetary and trading policies. Going forward, we will continually review the Fund to help ensure that it remains consistent with its investment objective by making adjustments, when necessary.

Penn Mutual Asset Management, LLC Investment Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Moderately Conservative Allocation Fund on December 31, 2008 would have grown to \$18,226. For the purpose of comparison, the graph also shows the change in the Fund's benchmarks, the Russell 3000 Index and the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the Russell 3000 Index on December 31, 2008 would have grown to \$34,495. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

	1 Year 5 Yea	r 10 Year
Moderately Conservative		
Allocation Fund	(3.47%) 3.36	6.19%
Russell 3000 Index	(5.24%) 7.91	% 13.18%
Bloomberg Barclays Capital U.S.		
Aggregate Bond Index	0.01% 2.52	3.48%

The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Asset Allocation Target as of 12/31/18

32.0%
25.0%
14.0%
8.0%
5.0%
5.0%
3.0%
3.0%
2.0%
2.0%
1.0%
100.0%

### **Conservative Allocation Fund**

The Penn Series Conservative Allocation Fund returned –1.34% for the twelve-month period ending December 31, 2018, compared to its benchmarks, the Russell 3000 Index's return of –5.24% and the Bloomberg Barclays Capital U.S. Aggregate Bond Index's return of 0.01% for the same time period.

The Conservative Allocation Fund is comprised of a target allocation of 20% equity funds and 80% fixed income funds. The equity allocation of the Fund is comprised of domestic equity funds ranging from large capitalization funds to small capitalization funds as well as developed international and emerging markets equity funds and the fixed income portion is primarily allocated to intermediate-term and short-term bond funds.

During the year of 2018, the Conservative Allocation Fund underperformed its 20% stock/80% bond performance benchmark by 0.48%.

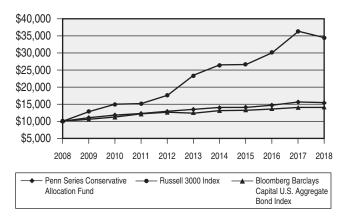
The asset allocation of the Conservative Allocation Fund contributed negatively to its performance. During the period, the Fund's allocation to value equities underperformed the Russell 3000 Index. In 2018, developed international equities significantly underperformed due to the divergence of economic growth between the U.S. and the rest of the world. The allocation in large cap growth equities and REITs generated positive asset allocation performance. On the fixed income side, allocation to short-term bonds contributed positively, while allocation to high yield bonds contributed negatively to performance.

Fund selection of the Conservative Allocation Fund contributed positively to its performance. During the period, our managers for Penn Series Flexibly Managed Fund, Penn Series Large Core Value Fund and Penn Series International Equity Fund outperformed their respective benchmarks by more than 1%. Penn Series Mid Cap Value Fund and Penn Series SMID Cap Value Fund underperformed their respective benchmarks by more than 1%. On the fixed income side, Penn Series High Yield Bond Fund outperformed; Quality Bond Fund and Limited Maturity Bond Fund underperformed their respective benchmarks.

Looking ahead, U.S. economic growth is projected to decelerate in 2019. We will also be facing potential headwinds from restrictive monetary and trading policies. Going forward, we will continually review the Fund to help ensure that it remains consistent with its investment objective by making adjustments, when necessary.

Penn Mutual Asset Management, LLC Investment Adviser

Cumulative Performance Comparison
December 31, 2008 — December 31, 2018



An investment of \$10,000 in the Conservative Allocation Fund on December 31, 2008 would have grown to \$15,469. For the purpose of comparison, the graph also shows the change in the Fund's benchmarks, the Russell 3000 Index and the Bloomberg Barclays Capital U.S. Aggregate Bond Index, during the same period. A \$10,000 investment in the Russell 3000 Index on December 31, 2008 would have grown to \$34,495. A \$10,000 investment in the Bloomberg Barclays Capital U.S. Aggregate Bond Index on December 31, 2008 would have grown to \$14,075.

	1 Year 5 Year	10 Year
Conservative Allocation	(1.34%) 2.68%	4.46%
Russell 3000 Index	(5.24%) 7.91%	13.18%
Bloomberg Barclays Capital U.S.		
Aggregate Bond Index	0.01% 2.52%	3.48%

<sup>1</sup> The performance information shown here does not reflect variable account charges and fees. Past performance is not predictive of future performance. Shares may be worth more or less when redeemed than when purchased. Assumes reinvestment of all dividends.

### Asset Allocation Target as of 12/31/18

Large Cap Value Stocks  Mid Cap Value Stocks  High Yield Bonds  International Stocks  Large Cap Growth Stocks  Small Cap Value Stocks  Domestic REITs  9.0%  9.0%  9.0%  1.0%  1.0%	Inte	rmediate Bonds	42.0%
Mid Cap Value Stocks  High Yield Bonds  International Stocks  Large Cap Growth Stocks  Small Cap Value Stocks  Domestic REITs  4.0%  4.0%  1.0%	Shoi	rt Term Bonds	35.0%
High Yield Bonds 3.0% International Stocks 3.0% Large Cap Growth Stocks 2.0% Small Cap Value Stocks 1.0% Domestic REITs 1.0%	Larg	e Cap Value Stocks	9.0%
International Stocks  Large Cap Growth Stocks  Small Cap Value Stocks  Domestic REITs  3.0%  1.0%  1.0%	Mid	Cap Value Stocks	4.0%
Large Cap Growth Stocks  Small Cap Value Stocks  Domestic REITs  1.0%	High	Yield Bonds	3.0%
Small Cap Value Stocks1.0%Domestic REITs1.0%	Inte	rnational Stocks	3.0%
Domestic REITs 1.0%	Larg	e Cap Growth Stocks	2.0%
<u></u>	Sma	ll Cap Value Stocks	1.0%
100.0%	Don	nestic REITs	1.0%
_			100.0%

## **Important Information about Fund Expenses**

Hypothetical Examples of a \$1,000 Investment (Unaudited)

We believe that it is important for you to understand the effect of fees on your investment. All mutual funds have operating expenses. As a participant in any of the Penn Series Funds, you incur ongoing costs, which include costs for portfolio management, administrative services, and shareholder reports among others. Operating expenses, which are deducted from a fund's gross income, directly reduce the investment return of the fund. A fund's expenses are expressed as a percentage of its average net assets. This figure is known as the expense ratio.

The Penn Series Funds are the underlying investment vehicles for the variable life and variable annuity contracts issued by The Penn Mutual Life Insurance Company and its subsidiary, The Penn Insurance and Annuity Company. These contracts have transaction costs, additional administrative expense fees and mortality and expense risk charges. Because of these additional expenses, the costs to investors will be higher than the figures shown in the following expense examples. The expense examples below are intended to help you understand your ongoing costs (in dollars) of investing in each fund and to compare these costs with the ongoing costs of investing in other funds.

These examples are based on an investment of \$1,000 invested for six months beginning July 1, 2018 and held through December 31, 2018. The examples illustrate your fund's costs in two ways:

- Actual Fund Performance in the table below provides information about actual account values and actual expenses. The "Ending Value" shown is derived from the fund's actual return, and "Expenses Paid During Period" shows the dollar amount that would have been paid by an investor who started with \$1,000 in the fund. You may use this information, together with the amount you invested, to estimate the expenses that you paid over the period. To do so, simply divide your account value by \$1,000 (for example, an \$8,600 account value divided by \$1,000 = 8.6), then multiply the result by the number given for your fund under the heading entitled "Expenses Paid During Period."
- Hypothetical 5% Annual Return is intended to help you compare your fund's costs with those of other mutual funds. It assumes that the fund had a return of 5% before expenses during the period shown, but that the expense ratio is unchanged. In this case because the return used is not the fund's actual return the results do not apply to your investment. The example is useful in making comparisons because the Securities and Exchange Commission requires all mutual funds to calculate expenses based on a 5% return. You can assess your fund's cost by comparing this hypothetical example with the hypothetical examples that appear in shareholders reports of other funds. Because the return used is not an actual return, it may not be used to estimate the actual ending account value or expenses you paid for the period.

Please note that the expenses shown in the table are only meant to highlight and help you compare your ongoing costs of investing in the funds and do not reflect any fees and charges deducted under your insurance contract. The "Annualized Expense Ratio" represents the actual expenses for the six-month period indicated and will be different from the expense ratio in the Financial Highlights which is for the year ended December 31, 2018.

# Disclosure of Fund Expenses For the Period July 1, 2018 to December 31, 2018 Expense Table

	Beginning Value July 1, 2018	Ending Value December 31, 2018	Annualized Expense Ratio	Expenses Paid During Period *
Money Market Fund				
Actual	\$1,000.00	\$1,005.43	0.59%	\$2.99
Hypothetical	\$1,000.00	\$1,022.19	0.59%	\$3.02
Limited Maturity Bond Fund				
Actual	\$1,000.00	\$1,010.71	0.70%	\$3.55
Hypothetical	\$1,000.00	\$1,021.64	0.70%	\$3.57

# Important Information about Fund Expenses Hypothetical Examples of a \$1,000 Investment (Unaudited)

	Beginning Value July 1, 2018	Ending Value December 31, 2018	Annualized Expense Ratio	Expenses Paid During Period *
Quality Bond Fund				
Actual	\$1,000.00	\$1,010.34	0.67%	\$3.38
Hypothetical	\$1,000.00	\$1,021.81	0.67%	\$3.40
High Yield Bond Fund				
Actual	\$1,000.00	\$ 985.46	0.72%	\$3.63
Hypothetical	\$1,000.00	\$1,021.51	0.72%	\$3.70
Flexibly Managed Fund				
Actual	\$1,000.00	\$ 980.24	0.89%	\$4.43
Hypothetical	\$1,000.00	\$1,020.68	0.89%	\$4.53
Balanced Fund				
Actual	\$1,000.00	\$ 962.07	0.20%	\$1.01
Hypothetical	\$1,000.00	\$1,024.17	0.20%	\$1.04
Large Growth Stock Fund				·
Actual	\$1,000.00	\$ 899.15	0.96%	\$4.57
Hypothetical	\$1,000.00	\$1,020.33	0.96%	\$4.88
Large Cap Growth Fund		. ,		
Actual	\$1,000.00	\$ 954.16	0.87%	\$4.27
Hypothetical	\$1,000.00	\$1,020.78	0.87%	\$4.43
Large Core Growth Fund		. ,		
Actual	\$1,000.00	\$ 914.33	0.86%	\$4.16
Hypothetical	\$1,000.00	\$1,020.80	0.86%	\$4.41
Large Cap Value Fund				
Actual	\$1,000.00	\$ 930.13	0.90%	\$4.40
Hypothetical	\$1,000.00	\$1,020.59	0.90%	\$4.62
Large Core Value Fund				·
Actual	\$1,000.00	\$ 933.51	0.91%	\$4.44
Hypothetical	\$1,000.00	\$1,020.56	0.91%	\$4.65
Index 500 Fund		. ,		
Actual	\$1,000.00	\$ 929.91	0.36%	\$1.76
Hypothetical	\$1,000.00	\$1,023.37	0.36%	\$1.84
Mid Cap Growth Fund	. ,	. ,		
Actual	\$1,000.00	\$ 898.81	0.96%	\$4.62
Hypothetical	\$1,000.00	\$1,020.29	0.96%	\$4.92
Mid Cap Value Fund				
Actual	\$1,000.00	\$ 833.65	0.79%	\$3.66
Hypothetical	\$1,000.00	\$1,021.16	0.79%	\$4.05
Mid Core Value Fund		. ,		
Actual	\$1,000.00	\$ 877.15	1.09%	\$5.16
Hypothetical	\$1,000.00	\$1,019.64	1.09%	\$5.57
SMID Cap Growth Fund	, ,	, , , , , , , , , , , , , , , , , , , ,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Actual	\$1,000.00	\$ 882.80	1.03%	\$4.90
Hypothetical	\$1,000.00	\$1,019.94	1.03%	\$5.27

# **Important Information about Fund Expenses**

Hypothetical Examples of a \$1,000 Investment (Unaudited)

	Beginning Value July 1, 2018	Ending Value December 31, 2018	Annualized Expense Ratio	Expenses Paid During Period *
SMID Cap Value Fund				
Actual	\$1,000.00	\$ 828.78	1.11%	\$5.13
Hypothetical	\$1,000.00	\$1,019.53	1.11%	\$5.68
Small Cap Growth Fund				
Actual	\$1,000.00	\$ 858.07	1.01%	\$4.73
Hypothetical	\$1,000.00	\$1,020.05	1.01%	\$5.16
Small Cap Value Fund				
Actual	\$1,000.00	\$ 847.07	0.98%	\$4.55
Hypothetical	\$1,000.00	\$1,020.23	0.98%	\$4.98
Small Cap Index Fund				
Actual	\$1,000.00	\$ 825.60	0.66%	\$3.06
Hypothetical	\$1,000.00	\$1,021.82	0.66%	\$3.39
Developed International Index Fund				
Actual	\$1,000.00	\$ 884.86	0.80%	\$3.80
Hypothetical	\$1,000.00	\$1,021.13	0.80%	\$4.08
International Equity Fund				
Actual	\$1,000.00	\$ 890.50	1.10%	\$5.24
Hypothetical	\$1,000.00	\$1,019.60	1.10%	\$5.61
Emerging Markets Equity Fund				
Actual	\$1,000.00	\$ 914.86	1.26%	\$6.08
Hypothetical	\$1,000.00	\$1,018.78	1.26%	\$6.43
Real Estate Securities Fund				
Actual	\$1,000.00	\$ 944.45	0.96%	\$4.72
Hypothetical	\$1,000.00	\$1,020.29	0.96%	\$4.92
Aggressive Allocation Fund				
Actual	\$1,000.00	\$ 906.58	0.34%	\$1.62
Hypothetical	\$1,000.00	\$1,023.49	0.34%	\$1.72
Moderately Aggressive Allocation Fund				
Actual	\$1,000.00	\$ 920.73	0.30%	\$1.45
Hypothetical	\$1,000.00	\$1,023.68	0.30%	\$1.53
Moderate Allocation Fund				
Actual	\$1,000.00	\$ 940.65	0.30%	\$1.44
Hypothetical	\$1,000.00	\$1,023.70	0.30%	\$1.51
Moderately Conservative Allocation Fund				
Actual	\$1,000.00	\$ 967.76	0.32%	\$1.57
Hypothetical	\$1,000.00	\$1,023.60	0.32%	\$1.61
Conservative Allocation Fund				
Actual	\$1,000.00	\$ 990.09	0.34%	\$1.71
Hypothetical	\$1,000.00	\$1,023.47	0.34%	\$1.74

<sup>\*</sup> Expenses are equal to the Fund's annualized expense ratio multiplied by the average value over the period, multiplied by the number of days in the most recent fiscal half-year (184), then divided by 365.

### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Money Market Fund

	(	Par (000)		Value†
AGENCY OBLIGATION — 59.4%				
Federal Farm Credit Banks				
2.234%, 01/16/19	\$	3,000	\$	2,997,225
(1 M ICE LIBOR + (0.050%)) 2.454%,				
01/23/19 •		3,500		3,500,084
2.329%, 01/25/19		3,000		2,995,360
(1 M ICE LIBOR + 0.180%) 2.681%, 01/25/19 •		1,500		1,500,585
Federal Home Loan Banks				
2.223%, 01/07/19		2,000		1,999,264
1.250%, 01/16/19		2,500		2,498,908
2.303%, 01/25/19		3,500		3,494,657
2.323%, 02/06/19		3,000		2,993,070
2.403%, 02/11/19		2,000		1,994,545
1.375%, 03/18/19		1,500		1,496,804
Federal Home Loan Mortgage Corp.				
2.251%, 01/18/19		5,000		4,994,711
2.335%, 02/20/19		4,000		3,987,111
2.364%, 03/20/19		6,000		5,969,515
Federal National Mortgage Association				
1.375%, 01/28/19		6,000		5,995,476
1.000%, 02/26/19		2,715		2,709,231
2.394%, 03/06/19		1,500		1,493,654
1.250%, 03/15/19		2,000		1,995,426
Tennessee Valley Authority				
2.325%, 01/15/19		7,335		7,328,382
2.370%, 01/29/19		6,000		5,988,971
Total AGENCY OBLIGATION				
(Cost \$65,932,979)			_	65,932,979
U.S. TREASURY OBLIGATION — 33.3%				
U.S. Treasury Bills				
2.226%, 01/10/19		7,500		7,495,845
2.236%, 01/17/19		7,000		6,993,076
2.236%, 01/24/19		3,500		3,495,032
2.244%, 01/31/19		5,000		4,990,725
2.325%, 02/05/19		3,500		3,492,112
U.S. Treasury Note				
1.500%, 01/31/19		6,500		6,495,337
0.750%, 02/15/19		4,000	_	3,991,903
TOTAL U.S. TREASURY OBLIGATION (Cost \$36,954,030)				36,954,030
		mber of hares		
SHORT-TERM INVESTMENTS — 7.2%				
Goldman Sachs Financial Square Funds — Government Fund Institutional Shares	-	205.065		
(Cost \$7,985,865)	7,	985,865	_	7,985,865
TOTAL INVESTMENTS — 99.9%				110,872,874
(Cost \$110,872,874)				
Other Assets & Liabilities — 0.1%			_	60,203
TOTAL NET ASSETS — 100.0%			\$	110,933,077

- † See Security Valuation Note.
- Variable rate security. The rate disclosed is the rate in effect on the
  report date. The information in parenthesis represents the
  benchmark and reference rate for each relevant security and the
  rate floats based upon the reference rate and spread. The security
  may be further subject to interest rate floors and caps. For loan
  agreements, the rate shown may represent a weighted average
  interest rate. Certain variable rate securities are not based on a
  published reference rate and spread, but are determined by the
  issuer or agent and are based on current market conditions, or, for
  mortgage-backed securities, are impacted by the individual
  mortgages which are paying off over time. These securities do not
  indicate a reference rate and spread in their descriptions.

ICE — Intercontinental Exchange.
LIBOR — London Interbank Offered Rate.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE							
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input			
AGENCY OBLIGATION	\$ 65,932,979	\$ —	\$ 65,932,979	\$			
U.S. TREASURY							
OBLIGATION	36,954,030	_	36,954,030	_			
SHORT-TERM							
INVESTMENTS	7,985,865	7,985,865	_				
TOTAL INVESTMENTS	\$110,872,874	\$7,985,865	\$102,887,009	\$—			

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

	Pai (000		Value†		Par (000)	Value†
ASSET BACKED SECURITIES — 16.0%	-	·-	<u> </u>			· · · · · · · · · · · · · · · · · · ·
Assurant CLO II Ltd. 2018-1A				Sound Point CLO V-R Ltd. 2014-1RA		
(3 M ICE LIBOR + 1.040%)				(3 M ICE LIBOR + 1.750%)		
3.509%, 04/20/31 144A @, •	\$ 1	800 \$	1,780,454	,	\$ 2,000	\$ 1,966,016
Barings CLO Ltd. 2017-1A			,, ,	Steele Creek CLO Ltd. 2017-1A	,	. ,- ,
(3 M ICE LIBOR + 1.700%)				(3 M ICE LIBOR + 1.600%)		
4.145%, 07/18/29 144A @, •	1	500	1,477,730	4.036%, 01/15/30 144A @,•	2,081	1,980,542
Benefit Street Partners CLO VIII Ltd.			, , ,	Tesla Auto Lease Trust 2018-A		
2015-8A				2.970%, 04/20/20 144A @	500	498,103
(3 M ICE LIBOR + 1.100%)				TRESTLES CLO Ltd. 2017-1A		
3.569%, 01/20/31 144A @,•	2	500	2,450,810	(3 M ICE LIBOR + 1.290%)		
BlueMountain CLO Ltd. 2015-1				3.780%, 07/25/29 144A @, •	1,250	1,238,781
(3 M ICE LIBOR + 1.330%)				Verizon Owner Trust 2017-3		
3.766%, 04/13/27 144A @,•	1	400	1,398,660	2.380%, 04/20/22 144A @	1,000	989,224
Brentwood CLO Corp. 2006-1A				Wellfleet CLO 2017-1 Ltd. 2017		
(3 M ICE LIBOR + 0.820%)				(3 M ICE LIBOR + 1.320%)		
3.361%, 02/01/22 144A @, •		238	237,367	3.789%, 04/20/29 144A @, •	1,250	1,245,361
Consumers Securitization Funding			. ,	TOTAL ACCET DACKED CECUDITIES		
LLC 2014-A				TOTAL ASSET BACKED SECURITIES		
1.334%, 11/01/20		476	473,238	(Cost \$37,762,385)		37,302,290
Crestline Denali CLO XVI Ltd. 2018-1A					45.40	
(3 M ICE LIBOR + 1.120%)				COMMERCIAL MORTGAGE BACKED SECURITIES	<u> — 15.1%                                   </u>	
3.589% <b>,</b> 01/20/30 144A @,•	3	,000	2,962,629	BHMS Series 2018-ATLS Class B		
DB Master Finance LLC 2015-1A				(1 M ICE LIBOR + 1.500%)		
3.980%, 02/20/45 144A @	1	,925	1,951,835	3.955%, 07/15/35 144A @, •	2,000	1,978,007
Entergy Arkansas Restoration Funding LLC				Citigroup Commercial Mortgage Trust		
2.300%, 08/01/21		492	489,492	Series 2018-TBR Class D		
Halcyon Loan Advisors Funding Ltd. 2015-2A				(1 M ICE LIBOR + 1.800%)	4 000	005 440
(3 M ICE LIBOR + 1.080%)				4.255%, 12/15/36 144A @,•	1,000	985,118
3.570%, 07/25/27 144A @, •	2	500	2,478,235	COMM Mortgage Trust Series 2014-		
Limerock CLO III LLC 2014-3A				UBS4 Class XA		
(3 M ICE LIBOR + 1.200%)				1.178%, 08/10/47 •	46,944	2,046,418
3.669%, 10/20/26 144A @, •	1	695	1,689,905	FHLMC Multifamily Structured Pass-		
Mariner CLO LLC 2018-6A				Through Certificates •		
(3 M ICE LIBOR + 1.680%)				1.627%, 03/25/22 Series K019	26.060	4 400 744
4.040%, 07/28/31 144A @,•	2	,000	1,901,148	Class X1	26,860	1,180,711
Mercedes-Benz Auto Lease Trust 2016-B				3.065%, 08/25/28 Series KC02	44.500	2 226 006
1.350%, 08/15/19		117	117,431	Class X1	14,500	2,326,806
Navient Private Education Loan Trust				FREMF Mortgage Trust 144A @		
144A @,•				5.501%, 04/25/20 Series 2010-K7	4 200	4 220 072
(1 M ICE LIBOR + 1.700%)				Class B •	1,200	1,230,973
4.155%, 11/15/30 2015-A	1	500	1,539,339	3.718%, 02/25/45 Series 2012-K708 Class C •	2,000	1,995,186
(1 M ICE LIBOR + 1.600%)				3.558%, 08/25/45 Series 2012-K711 Class B •	2,000	1,999,450
4.055%, 10/15/31 2014-A	1	499	1,546,368	3.154%, 04/25/46 Series 2013-K713 Class B •	1,765	1,761,211
Ocean Trails CLO V 2014-5A				5.367%, 12/25/46 Series 2010-K6 Class B •	3,000	3,058,464
(3 M ICE LIBOR + 1.280%)				3.854%, 01/25/47 Series 2014-K714 Class B •	1,500	1,517,043
3.788%, 10/13/31 144A @,∙	2	,000	1,970,166	5.180%, 02/25/47 Series 2011-K14 Class B •	1,050	1,095,501
Rockwall CDO II Ltd. 2007-1A				3.817%, 06/25/47 Series 2012-K710 Class B •	2,110	2,104,410
(3 M ICE LIBOR + 0.700%)				3.949%, 08/25/47 Series 2014-K716 Class B •	2,550	2,594,043
3.241%, 08/01/24 144A @, •		131	131,296	4.416%, 12/25/48 Series 2011-K11 Class B •	1,500	1,538,626
SLM Student Loan Trust 2005-10				Government National Mortgage		
(3 M ICE LIBOR + 0.270%)				Association		
2.760%, 10/26/26 •	2	438	2,311,551	Series 2011-92 Class B		45.345
SMB Private Education Loan Trust 2015-C				3.200%, 11/16/44	15	15,365
(1 M ICE LIBOR + 1.950%)				GS Mortgage Securities Corp Trust		
4.405% <b>,</b> 08/16/32 144A @,•	2	405	2,476,609	Series 2018-HULA Class B		
				(1 M ICE LIBOR + 1.250%)	2.000	1 076 735
				3.705%, 07/15/25 144A @,∙	2,000	1,976,725

	Par (000)	Value†		Par (000)	Value†
COMMERCIAL MORTGAGE BACKED SECURITIES	• /	· · · · · · · · · · · · · · · · · · ·		(000)	value
GS Mortgage Securities Trust Series 2010-C1	(3311111		Auto Manufacturers — 0.4%		
5.148%, 08/10/43 144A @	2,000	\$ 2,042,892	General Motors Financial Co., Inc.		
J.P. Morgan Chase Commercial Mortgage			(3 M ICE LIBOR + 0.850%)		
Securities Trust Series 2018-PHH Class C			3.258%, 04/09/21 •	\$ 1,000	\$ 977,240
(1 M ICE LIBOR + 1.360%)			Banks — 4.3%		
3.815%, 06/15/35 144A @, •	2,000	1,979,057	Bank of Montreal		
WFRBS Commercial Mortgage Trust Series			3.100%, 07/13/20	1,500	1,499,177
2012-C7 Class XA	40.020	4 944 364	Bank of Nova Scotia	•	, ,
1.405%, 06/15/45 144A @,•	49,839	1,811,264	3.125%, 04/20/21	1,500	1,497,635
TOTAL COMMERCIAL MORTGAGE BACKED SEC	URITIES		Central Fidelity Capital Trust I		
(Cost \$36,837,385)		35,237,270	(3 M ICE LIBOR + 1.000%)		
			3.436%, 04/15/27 •	1,750	1,575,000
CORPORATE BONDS — 57.8%			CIT Group, Inc.		
Advertising — 0.7%			4.125%, 03/09/21	1,000	985,000
The Interpublic Group of Cos., Inc.			Citibank NA	1 500	4 504 006
3.500%, 10/01/20	1,500	1,501,857	3.400%, 07/23/21 Mitsubishi UFJ Financial Group, Inc.	1,500	1,501,906
Aerospace & Defense — 0.4%			3.535%, 07/26/21	1,500	1,505,637
United Technologies Corp.			Wells Fargo Bank NA	1,500	1,505,057
3.350%, 08/16/21	1,000	997,294	(3 M ICE LIBOR + 0.490%)		
Agriculture — 0.4%			3.325%, 07/23/21 •	1,500	1,498,538
Cargill, Inc.			,	•	10,062,893
3.050%, 04/19/21 144A @	1,000	999,009			10,002,077
Airlines 7.0%			Beverages — 2.1%		
Air Canada 2013-1 Class B Pass Through Trust			Anheuser-Busch InBev Finance, Inc.		
5.375%, 11/15/22 144A @	974	984,834	3.300%, 02/01/23	1,500	1,458,523
American Airlines 2013-2 Class B Pass Through	7/ 7	704,074	Constellation Brands, Inc.		
Trust			2.250%, 11/06/20	2,000	1,961,828
5.600%, 07/15/20 144A @	1,768	1,781,613	Keurig Dr Pepper, Inc.		
British Airways 2013-1 Class B Pass Through	,	, ,	3.551%, 05/25/21 144A @	1,500	1,497,728
Trust					4,918,079
5.625%, 12/20/21 144A @	907	919,164			
Continental Airlines Pass Through Trust			Biotechnology — 0.6%		
6.545%, 08/02/20 1999-1 Class A	255	256,017	Celgene Corp.		
7.256%, 09/15/21 1999-2	965	981,633	2.875%, 02/19/21	1,500	1,484,558
6.250%, 10/11/21 2012-1 Class B	1,129	1,146,020	Building Materials — 0.6%		
7.707%, 10/02/22 2000-2	212	220,801	Vulcan Materials Co.		
Delta Air Lines Pass Through Trust 6.875%, 05/07/19 2012-1 Class B 144A @	1,228	1,243,774	(3 M ICE LIBOR + 0.650%)		
8.021%, 02/10/24 2007-1 Class B	896	975,437	3.388%, 03/01/21 •	1,500	1,488,741
Delta Air Lines, Inc.	0,0	575,157	Chemicals — 1.9%		
2.875%, 03/13/20	2,000	1,986,713	CF Industries, Inc.		
3.400%, 04/19/21	1,000	991,655	7.125%, 05/01/20	1,000	1,030,000
Northwest Airlines Pass Through Trust 2007-1	,	,	Huntsman International LLC	•	, ,
Class A			4.875%, 11/15/20	1,500	1,503,750
7.027%, 05/01/21	2,266	2,328,135	International Flavors & Fragrances, Inc.		
U.S. Airways Pass Through Trust			3.400%, 09/25/20	500	500,384
8.000%, 04/01/21 2012-1 Class B	1,967	2,030,294	Methanex Corp.		
6.750%, 12/03/22 2012-2 Class B	2,342	2,447,490	3.250%, 12/15/19	1,453	1,442,089
		18,293,580			4,476,223
			Computers — 0.4%		
			IBM Credit LLC		
			3.450%, 11/30/20	1,000	1,005,170

	Par (000)		Value†		 Par (000)	Value†
CORPORATE BONDS — (continued)						
Diversified Financial Services — 2.6% BOC Aviation Ltd. (3 M ICE LIBOR + 1.050%)		0 1	2 005 040	Healthcare Services — (continued) Humana, Inc. 2.500%, 12/15/20	\$ 1,000	\$ 984,914
3.609%, 05/02/21 144A @, • GE Capital International Funding Co.	\$ 2,00		2,005,918	UnitedHealth Group, Inc. 3.150%, 06/15/21	2,000	2,002,652
2.342%, 11/15/20 USAA Capital Corp.	2,00		1,930,111			7,446,078
3.000%, 07/01/20 144A @	2,00	0	1,998,014	Home Builders — 0.4%		
		_	5,934,043	Lennar Corp. 2.950%, 11/29/20	1,000	968,900
Electric — 2.1%				Housewares — 1.8%		
CenterPoint Energy, Inc. 3.600%, 11/01/21 Fortive Corp.	1,00	0	1,002,090	DR Horton, Inc. 2.550%, 12/01/20	2,000	1,951,868
1.800%, 06/15/19	17-	4	171,919	Newell Brands, Inc.		
Mississippi Power Co. (3 M ICE LIBOR + 0.650%)	.,		.,,,,,,,,,,	5.000%, 11/15/23	2,250	2,289,326 4,241,194
3.472%, 03/27/20 •	1,50	0	1,497,463	Internet — 0.8%		
San Diego Gas & Electric Co. 1.914%, 02/01/22	80	2	797 //)	Tencent Holdings Ltd.		
Sempra Energy	00,	)	787,442	2.875%, 02/11/20 144A @	1,750	1,742,859
(3 M ICE LIBOR + 0.500%)				Lodging — 0.9%		
2.936%, 01/15/21 •	1,50	0	1,474,809	Marriott International, Inc.		
		_	4,933,723	(3 M ICE LIBOR + 0.600%) 3.229%, 12/01/20 •	2,000	1,995,189
Entertainment — 1.5%					_,	
GLP Capital LP / GLP Financing II, Inc.		_		Machinery - Diversified — 2.6% ABB Finance USA, Inc.		
4.875%, 11/01/20 Royal Caribbean Cruises Ltd.	2,00	0	2,017,000	2.800%, 04/03/20	1,500	1,494,307
2.650%, 11/28/20	1,50	0	1,472,480	Caterpillar Financial Services Corp.	,	, ,
	.,,,,,	_	3,489,480	3.150%, 09/07/21	1,500	1,503,952
- 1 20%		_	3, 103, 100	John Deere Capital Corp.		
Food — 2.8% Campbell Soup Co.				(3 M ICE LIBOR + 0.240%) 3.016%, 03/12/21 •	2,000	1,991,281
3.300%, 03/15/21	2,00	0	1,989,604	Wabtec Corp.	2,000	1,551,201
General Mills, Inc.	,		,,	(3 M ICE LIBOR + 1.050%)		
3.200%, 04/16/21	1,00	0	994,508	3.838%, 09/15/21 •	1,000	1,000,159
Mondelez International Holdings Netherlands BV						5,989,699
1.625%, 10/28/19 144A @	1,50	0	1,479,113	Media — 1.8%		
Smithfield Foods, Inc.	2.00	0	4.072.022	Comcast Corp.		
2.700%, 01/31/20 144A @	2,00	<sup>0</sup> —	1,972,922	3.450%, 10/01/21	2,000	2,020,278
		_	6,436,147	Warner Media LLC	2 000	3.050.060
Healthcare Products — 1.3%				4.700%, 01/15/21	2,000	2,050,860
Stryker Corp.	1.00	0	009 420			4,071,138
2.000%, 03/08/19 Zimmer Biomet Holdings, Inc.	1,00	U	998,429	Mining — 1.3%		
(3 M ICE LIBOR + 0.750%)				Freeport-McMoRan, Inc. 3.100%, 03/15/20	1,500	1,466,250
3.554%, 03/19/21 •	2,00	0	1,981,272	Teck Resources Ltd.	1,500	1,700,200
			2,979,701	8.500%, 06/01/24 144A @	1,500	1,606,875
Healthcare Services — 3.2%						3,073,125
Becton Dickinson and Co.				Miscellaneous Manufacturing — 0.6%		
2.404%, 06/05/20	2,00	0	1,968,787	Ingersoll-Rand Global Holding Co., Ltd.		
Cigna Corp.	3.50	0	2 490 725	2.900%, 02/21/21	1,500	1,485,840
3.200%, 09/17/20 144A @	2,50	U	2,489,725			

	Par (000)		Value†		Par (000)	Value†
CORPORATE BONDS — (continued)						
Oil & Gas — 2.1%				Software — 1.9%		
EOG Resources, Inc.				Activision Blizzard, Inc.		
2.450%, 04/01/20	\$ 2,00	0 \$	1,980,619	2.300%, 09/15/21	1,000	\$ 973,893
EQT Corp.				CDK Global, Inc.		
2.500%, 10/01/20	1,00	0	977,836	3.800%, 10/15/19	1,500	1,492,500
Phillips 66				VMware, Inc.	2 000	1 050 046
(3 M ICE LIBOR + 0.600%) 3.289%,	2.00		4 077 626	2.300%, 08/21/20	2,000	1,958,916
02/26/21 •	2,00	_	1,977,636			4,425,309
		_	4,936,091	Telecommunications — 0.6%		
Packaging and Containers — 1.5%				Sprint Spectrum Co., LLC		
Ball Corp.				3.360%, 03/20/23 144A @	1,375	1,357,812
4.375%, 12/15/20	1,52	5	1,530,719		,	
Greif, Inc.	,		, ,	TOTAL CORPORATE BONDS		43.4 #30.664
7.750%, 08/01/19	1,00	0	1,017,500	(Cost \$135,767,670)		134,720,664
Reynolds Group Issuer, Inc.				AMUNICIPAL PONDS 3.2%		
5.750%, 10/15/20	96	9	966,685	MUNICIPAL BONDS — 3.3%		
			3,514,904	New York City, New York, Build America		
		_	2,2 + 1,2 = 1	Bonds Fiscal 2010 Series H		
Pharmaceuticals — 3.6%				6.246%, 06/01/35	1,510	1,572,544
Bayer US Finance II LLC	2.00		4 005 043	State of California, Los Angeles		
3.500%, 06/25/21 144A @	2,00	10	1,985,842	Department of Water & Power, Power		
CVS Health Corp.				System Revenue	2.000	2 000 700
(3 M ICE LIBOR + 0.630%) 3.397%, 03/09/20 ◆	2.00	ın	1 006 269	6.166%, 07/01/40	2,000	2,090,700
Shire Acquisitions Investments Ireland DAC	2,00	0	1,996,368	State of Florida, Board of Education Lottery Revenue, Build America Bond, Series		
1.900%, 09/23/19	2,00	ın	1,971,972	2010B		
Teva Pharmaceutical Finance Netherlands	2,00		1,57 1,572	6.584%, 07/01/29	2,000	2,038,380
III BV				University of Texas System, Build America	2,000	2,050,500
1.700%, 07/19/19	1,00	0	984,477	Bond, Series B		
Zoetis, Inc.	,		,	6.276%, 08/15/41	2,000	2,042,340
3.250%, 08/20/21	1,50	0	1,495,557	Total MUNICIPAL BONDS	_,	_,,
,	ŕ	_	8,434,216	(Cost \$7,790,976)		7,743,964
Dinalinas 2.4%		-	-, 1,5 1,5 10			
Pipelines — 2.4% Energy Transfer LP				RESIDENTIAL MORTGAGE BACKED SECURITIE	ES — 0.0%	
7.500%, 10/15/20	1,50	ın	1,560,000	Fannie Mae Pool — 0.0%		
Midcontinent Express Pipeline LLC	1,50		1,500,000	Fannie Mae Pool Fannie Mae Pool		
6.700%, 09/15/19 144A @	2,00	0	2,018,753	4.000%, 06/01/20		
Rockies Express Pipeline LLC	2,00		2,0 .0,7 55	(Cost \$20,493)	20	20,953
6.000%, 01/15/19 144A @	2,00	0	2,000,000	(====,===)		
, , , , ,	,	_	5,578,753	U.S TREASURY OBLIGATION — 7.4%		
		-	3,370,733	U.S. Treasury Inflation Indexed Bonds		
Retail — 1.9%				1.375%, 01/15/20	2,339	2,323,846
Family Dollar Stores, Inc.	4.50		4.536.350	2.750%, 11/30/20	4,000	4,018,125
5.000%, 02/01/21	1,50	10	1,526,250	0.375%, 07/15/27	4,911	4,658,391
Penske Automotive Group, Inc.	4.50	10	1 462 500	U.S. Treasury Note	,-	, , , , , ,
3.750%, 08/15/20	1,50	10	1,462,500	1.250%, 01/31/19	1,000	999,141
QVC, Inc. 3.125%, 04/01/19	1,50	ın	1 406 581	0.875%, 04/15/19	1,200	1,194,727
אר 12 אין טון טן דע (1 אר 12 איז אר 12 איז ער 12 אר 12 א	1,50	_	1,496,581	1.625%, 04/30/19	1,225	1,221,555
		_	4,485,331	1.625%, 07/31/19	1,750	1,740,635
Semiconductors — 0.4%				1.625%, 12/31/19	1,100	1,089,043
Analog Devices, Inc.				Total U.S TREASURY OBLIGATION		
2.850%, 03/12/20	1,00	0	996,488	(Cost \$17,501,553)		17,245,463
				· · · · · · · · · · · · · · · · · · ·		

	Number of Shares	Value†
SHORT-TERM INVESTMENTS — 1.5%		
BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares (Cost \$3,568,100)	3,568,100	\$ 3,568,100
TOTAL INVESTMENTS — 101.1% (Cost \$239,248,562) Other Assets & Liabilities — (1.1)%		235,838,704 (2,622,670)
TOTAL NET ASSETS — 100.0%		\$ 233,216,034

† See Security Valuation Note.

144A @ Security exempt from registration under Rule 144A of the Securities Act of 1933, as amended. At December 31, 2018, the aggregate value of Rule 144A securities was \$90,116,135, which represents 38.6% of the Fund's net assets.

• Variable rate security. The rate disclosed is the rate in effect on the report date. The information in parenthesis represents the benchmark and reference rate for each relevant security and the rate floats based upon the reference rate and spread. The security may be further subject to interest rate floors and caps. For loan agreements, the rate shown may represent a weighted average interest rate. Certain variable rate securities are not based on a published reference rate and spread, but are determined by the issuer or agent and are based on current market conditions, or, for mortgage-backed securities, are impacted by the individual mortgages which are paying off over time. These securities do not indicate a reference rate and spread in their descriptions.

CLO — Collateralized Loan Obligation.

ICE — Intercontinental Exchange.

LIBOR — London Interbank Offered Rate.

LLC — Limited Liability Company.

LP — Limited Partnership.

NA — National Association.

Country Weightings as of 12/31/2018 #

United States	82%
Cayman Islands	10
Canada	3
Ireland	2
Cote D'Ivoire (Ivory Coast)	1
Japan	1
Slovenia	1
Total	100%

††% of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Notes):

ASSETS TABLE								
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input				
U.S. TREASURY								
OBLIGATION	\$ 17,245,463	\$ —	\$ 17,245,463	\$				
ASSET BACKED								
SECURITIES	37,302,290	_	37,302,290	_				
COMMERCIAL								
MORTGAGE BACKED								
SECURITIES	35,237,270	_	35,237,270					
CORPORATE BONDS	134,720,664	_	134,720,664	_				
MUNICIPAL BONDS	7,743,964	_	7,743,964	_				
RESIDENTIAL								
MORTGAGE BACKED								
SECURITIES	20,953	_	20,953	_				
SHORT-TERM								
INVESTMENTS	3,568,100	3,568,100	_	_				
TOTAL INVESTMENTS	\$235,838,704	\$3,568,100	\$232,270,604	\$—				
OTHER FINANCIAL INSTRUMENTS(1)								
Futures Contracts	\$ 442,745	\$ 442,745	\$ —	\$ <del></del>				
TOTAL ASSETS —								
OTHER FINANCIAL								
INSTRUMENTS	\$ 442,745	\$ 442,745	\$ —	\$				

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as future contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

#### **Futures Contracts:**

Туре	Futures Contract	Expiration Date	of Contracts	per Contract	Closing Price	Notional Value	Unrealized Appreciation	Unrealized Depreciation
Buy/Long	US Treasury 5 year Note	3/29/2019	35	1,000	\$115	\$ 4,014,063	\$ 63,984	\$——
Buy/Long	US Treasury 2 year Note	3/29/2019	227	2,000	106	48,194,938	300,675	_
Buy/Long	US Treasury 10 year Ultra Bond	3/29/2019	20	1,000	130	2,601,563	78,086	_
Total							\$442,745	<u>\$—</u>

11.30

	Par (000)	Value†		Par (000)	Value†
ASSET BACKED SECURITIES — 11.9%					
Brentwood CLO Corp. 2006-1A	\$ 5,223	\$ 5,198,794	FREMF Mortgage Trust144A @ 4.336%, 12/25/44 Series 2012-K17 Class B • 4.029%, 05/25/45 Series 2012-K19 Class C •	\$ 4,000 4,500	\$ 4,132,347 4,493,996
(3 M ICE LIBOR + 0.820%) 3.361%, 02/01/22 144A @, • Fortress Credit BSL III Ltd. 2015 -1A (3 M ICE LIBOR + 1.730%)	476	474,734	3.558%, 08/25/45 Series 2012-K711 Class C • 3.656%, 10/25/45 Series 2012-K23 Class C • 5.367%, 12/25/46 Series 2010-K6	6,000 5,000	5,991,950 4,922,114
4.175%, 04/18/31 144A @, • KeyCorp Student Loan Trust 2006-A	3,000	2,864,787	Class B • 3.817%, 06/25/47 Series 2012-K710	7,795	7,946,910
(3 M ICE LIBOR + 0.310%) 3.132%, 09/27/35 •	386	386,112	Class B • 3.045%, 10/25/47 Series 2014-K503	5,175	5,161,289
Mountain View CLO LLC 2017-2A (3 M ICE LIBOR + 1.210%)		220,112	Class B • 3.637%, 08/25/48 Series 2015-K48	5,000	4,979,021
3.646%, 01/16/31 144A @, • Navient Private Education Loan Trust	3,500	3,440,980	Class B • 4.416%, 12/25/48 Series 2011-K11	5,000	4,878,779
2015-A (1 M ICE LIBOR + 1.700%)			Class B • 3.923%, 01/25/49 Series 2016-K52 Class B •	3,000 5,065	3,077,251 5,035,881
4.155%, 11/15/30 144A @, • Rockwall CDO II Ltd. 2007-1A	3,000	3,078,677	Government National Mortgage Association Series 2011-77 Class D	2,002	2,022,001
(3 M ICE LIBOR + 0.700%) 3.241%, 08/01/24 144A @, •	254	254,326	5.215%, 10/16/45 •	1,316	1,373,206
SLM Student Loan Trust • (3 M ICE LIBOR + 0.270%)			TOTAL COMMERCIAL MORTGAGE BACKED SE (Cost \$79,860,626)	CURITIES	79,311,862
2.760%, 10/26/26 2005-10 (1 M ICE LIBOR + 1.000%)	5,000	4,740,672	CORPORATE BONDS — 54.3%		
3.506%, 04/27/43 2012-6 SMB Private Education Loan Trust	4,860	4,662,718	Aerospace & Defense — 1.5% General Dynamics Corp.		
2015-C 144A @ (1 M ICE LIBOR + 1.950%)			3.500%, 05/15/25 Lockheed Martin Corp.	3,000	2,987,740
4.405%, 08/16/32 • 3.500%, 09/15/43 2015	5,000 5,000	5,148,874 4,909,864	3.100%, 01/15/23	3,000	2,973,461 5,961,201
Sound Point CLO V-R Ltd. 2014-1RA (3 M ICE LIBOR + 1.750%) 4.083%, 07/18/31 144A @, • Steele Creek CLO Ltd. 2016-1A	6,000	5,898,048	<b>Agriculture</b> — <b>0.7</b> % Cargill, Inc. 3.250%, 03/01/23 144A @	3,000	2,995,434
(3 M ICE LIBOR + 1.650%) 4.438%, 06/15/31 144A @, • Trinitas CLO IV Ltd. 2016-4A	3,250	3,080,084	Airlines — 7.3% Air Canada 2013-1 Class B Pass Through Trust		
4.548%, 10/18/31 144A @	4,300	4,342,815	5.375%, 11/15/22 144A @ American Airlines 2013-2 Class B Pass	3,560	3,598,814
TOTAL ASSET BACKED SECURITIES (Cost \$48,732,498)		48,481,485	Through Trust 5.600%, 07/15/20 144A @ Continental Airlines Pass Through Trust	3,158	3,181,452
COMMERCIAL MORTGAGE BACKED SECURIT	IES — 19.4%	_	6.250%, 10/11/21 2012-1 Class B	896	910,075
CFCRE Commercial Mortgage Trust Series 2011-C1			5.500%, 04/29/22 2012-2 Class B Delta Air Lines Pass Through Trust	1,636	1,652,050
4.961%, 04/15/44 144A @, • FHLMC Multifamily Structured Pass-	748	771,795	6.821%, 02/10/24 2007-1 Class A 8.021%, 02/10/24 2007-1 Class B	3,236 4,122	3,494,886 4,484,736
Through Certificates Series K019 Class X1 1.627%, 03/25/22 •	48,457	2,130,100	4.250%, 01/30/25 2015-1 Class B Delta Air Lines, Inc. 3.800%, 04/19/23	2,418	2,442,961 1,968,006
FHLMC Multifamily Structured Pass- Through Certificates	2.000	3,000,534	Northwest Airlines Pass Through Trust 2007-1 Class A		
3.062%, 12/25/24 Series K043 Class A2 2.653%, 08/25/26 Series K058 Class A2	3,000 5,000	2,999,526 4,812,432	7.027%, 05/01/21 United Airlines Pass Through Trust	3,344	3,435,488
3.347%, 11/25/26 Series K061 Class A2 • Freddie Mac REMICS	4,750	4,781,440	4.750%, 10/11/23 2014-1 Class B 3.100%, 01/07/30 2016-1 Class AA	1,978 2,842	1,982,721 2,736,437
3.500%, 09/15/43 Series 4640 Class LG 5.000%, 11/15/45 Series 4800 Class KB	5,899 5,633	5,849,796 5,974,029			29,887,626

	Par (000)		Value†		Par (000)	Value†
CORPORATE BONDS — (continued)						
Auto Manufacturers — 1.0%				Computers — 0.7%		
BMW US Capital LLC 3.450%, 04/12/23 144A @	\$ 4,000	\$	3,970,929	Dell International LLC 5.450%, 06/15/23 144A @	\$ 3,000	\$ 3,052,921
Banks — 5.8%				Diversified Financial Services — 1.6%		
BAC Capital Trust XIII				Air Lease Corp.		
(3 M ICE LIBOR + 0.400%)	2.006		2 704 720	3.750%, 02/01/22	2,000	1,979,107
4.000%, 06/15/49 • JPMorgan Chase & Co.	3,896		2,706,728	General Electric Capital Corp.		
(3 M ICE LIBOR + 3.300%)				7.500%, 08/21/35	2,263	2,401,727
6.000%, 02/01/67 •	4,710		4,604,025	Raymond James Financial, Inc.	2.500	2 255 046
KeyCorp. Capital I	.,,,		.,,	3.625%, 09/15/26	2,500	2,355,946
(3 M ICE LIBOR + 0.740%)						6,736,780
3.537%, 07/01/28 •	2,640		2,323,200	Electric — 2.5%		
NTC Capital I				ComEd Financing III		
(3 M ICE LIBOR + 0.520%)	F F0F		F 440 42F	6.350%, 03/15/33	3,355	3,472,559
2.956%, 01/15/27 • PNC Capital Trust C	5,595		5,119,425	Dominion Energy, Inc.		
(3 M ICE LIBOR + 0.570%)				4.250%, 06/01/28	3,000	3,010,052
3.308%, 06/01/28 •	2,000		1,827,876	FirstEnergy Corp.		
State Street Corp.	_,		.,,,-,	3.900%, 07/15/27	4,000	3,876,835
(3 M ICE LIBOR + 0.560%)						10,359,446
3.176%, 05/15/28 •	2,000		1,790,000	Food — 3.5%		
USB Capital IX				General Mills, Inc.		
(3 M ICE LIBOR + 1.020%)	4 000		2.060.000	4.000%, 04/17/25	3,000	2,952,433
3.500%, 10/15/66 • Washovia Capital Trust III	4,000		2,960,000	JM Smucker Co.	,	
Wachovia Capital Trust III (3 M ICE LIBOR + 0.930%)				3.375%, 12/15/27	2,000	1,857,676
5.570%, 03/15/67 •	2,510		2,270,295	Kellogg Co.		
3.37 6.6, 637 .3767	2,5.0	_		2.650%, 12/01/23	3,000	2,836,634
		_	23,601,549	Land O' Lakes, Inc.		
Beverages — 0.8%				6.000%, 11/15/22 144A @	3,500	3,652,772
Anheuser-Busch InBev Worldwide, Inc.	2.500		2 200 440	Smithfield Foods, Inc.	2 000	2 969 072
3.650%, 02/01/26 144A @	3,500	_	3,309,419	3.350%, 02/01/22 144A @	3,000	2,868,972
Biotechnology — 1.2%						14,168,487
Amgen, Inc.				Forest Products & Paper — 0.6%		
2.700%, 05/01/22	3,000		2,937,692	Georgia-Pacific LLC		
2.650%, 05/11/22	2,000	_	1,955,087	3.163% <b>,</b> 11/15/21 144A @	2,500	2,477,414
		_	4,892,779	Gas — 0.6%		
Building Materials — 1.6%				The Brooklyn Union Gas Co.		
Martin Marietta Materials, Inc.				3.407%, 03/10/26 144A @	2,500	2,449,076
4.250%, 07/02/24	3,000		3,036,235	Healthcare Products — 1.3%		
Vulcan Materials Co.	2.565		2.544.200	Becton Dickinson and Co.		
4.500%, 04/01/25	3,565	_	3,541,380	3.700%, 06/06/27	3,000	2,837,514
		_	6,577,615	Zimmer Biomet Holdings, Inc.	5,000	2,007,011
Chemicals — 0.8%				4.625%, 11/30/19	1,000	1,011,620
Methanex Corp.				(3 M ICE LIBOR + 0.750%)	,	,- ,-
3.250%, 12/15/19	3,159		3,135,279	3.554%, 03/19/21 •	1,500	1,485,954
Commercial Services — 1.4%						5,335,088
Drawbridge Special Opportunities Fund LP				Harlibara Carlos and San		
5.000%, 08/01/21 144A @	2,000		1,999,498	Healthcare Services — 0.5%		
ERAC USA Finance LLC				HCA Healthcare, Inc.	2 000	) DAE 000
2.350%, 10/15/19 144A @	1,000		993,237	6.250%, 02/15/21	2,000	2,045,000
IHS Markit Ltd.	2.500		2 525 222	Home Builders — 0.2%		
5.000%, 11/01/22 144A @	2,500	_	2,525,000	Lennar Corp.		
		_	5,517,735	2.950%, 11/29/20	1,000	968,900

	Par (000)	Value†		Par (000)	Value†
CORPORATE BONDS — (continued)					
Housewares — 1.4% Newell Brands, Inc. 5.000%, 11/15/23	\$ 3,517	3,578,471	Pipelines — (continued) Midcontinent Express Pipeline LLC 6.700%, 09/15/19 144A @	\$ 4,000	\$ 4,037,507
Newell Rubbermaid, Inc. 4.200%, 04/01/26	2,000	1,954,638	Transcanada Trust (3 M ICE LIBOR + 4.640%)		
	· -	5,533,109	5.875%, 08/15/76 •	3,000	2,821,800 12,060,256
Internet — 1.0%			Real Estate Investment Trusts — 2.0%		
Alibaba Group Holding Ltd. 3.400%, 12/06/27 Tencent Holdings Ltd.	1,000	924,659	American Tower Corp. 4.700%, 03/15/22	2,500	2,567,603
2.875%, 02/11/20 144A @	3,000	2,987,758	Kimco Realty Corp.	2 000	2 609 251
	_	3,912,417	2.800%, 10/01/26 SBA Tower Trust	3,000	2,698,351
Lodging — 0.8%			3.156%, 10/10/45 144A @	3,000	2,970,090
Marriott International, Inc. 4.500%, 10/01/34	2 500	2 228 440			8,236,044
Media — 2.0% Charter Communications Operating LLC	3,500	3,338,440	Retail — 1.4% Alimentation Couche-Tard, Inc. 3.550%, 07/26/27 144A @	3,000	2,801,022
4.464%, 07/23/22	3,000	3,028,817	Starbucks Corp.	2,000	2,001,022
Comcast Cable Holdings LLC 9.875%, 06/15/22	1,000	1,196,624	3.100%, 03/01/23	3,000	2,954,858 5,755,880
Comcast Corp.	4.000	4 0 4 7 7 4 0	Software — 1.6%		
3.950%, 10/15/25	4,000	4,047,349	CDK Global, Inc.		
Mining 0.2%	-	8,272,790	3.800%, 10/15/19 VMware, Inc.	3,500	3,482,500
Mining — 0.2% Goldcorp, Inc.			2.950%, 08/21/22	3,000	2,859,503
3.625%, 06/09/21	1,000	996,961			6,342,003
Oil & Gas — 0.8%			Telecommunications — 2.2%		
BG Energy Capital PLC 4.000%, 10/15/21 144A @ BP Capital Markets PLC	1,000	1,014,012	Crown Castle Towers LLC 3.663%, 05/15/45 144A @ Nokia OYJ	4,000	3,885,840
2.500%, 11/06/22	2,500	2,418,428	4.375%, 06/12/27	1,325	1,232,250
	-	3,432,440	6.625%, 05/15/39 Sprint Spectrum Co., LLC	2,000	2,030,000
Packaging and Containers — 0.7%			3.360%, 03/20/23 144A @	2,063	2,036,719
Ball Corp. 4.375%, 12/15/20	3,000	3,011,250			9,184,809
Pharmaceuticals — 2.7% AbbVie, Inc.	-		<b>Transportation</b> — <b>0.9</b> % BNSF Railway Co. Pass Through Trust 2015-1		
2.300%, 05/14/21 CVS Health Corp.	3,000	2,929,715	3.442%, 06/16/28 144A @ Federal Express Corp. Pass Through Trust	2,605	2,546,640
4.100%, 03/25/25 GlaxoSmithKline Capital, Inc.	2,000	1,980,045	1999 7.650%, 07/15/24	856	919,157
5.375%, 04/15/34 Mead Johnson Nutrition Co.	1,000	1,144,519			3,465,797
4.125%, 11/15/25 Zoetis, Inc.	2,000	2,051,790	TOTAL CORPORATE BONDS (Cost \$228,620,061)		222,169,965
4.500%, 11/13/25	3,000	3,079,022	MUNICIPAL BONDS — 5.8%		
Pipelines — 3.0% Energy Transfer LP	-	11,185,091	Florida Governmental Utility Authority, Lindrick Utility System, Build America Bonds		
7.500%, 10/15/20	3,000	3,120,000	7.630%, 10/01/30	2,250	2,390,512
Energy Transfer Partners LP 5.875%, 03/01/22	2,000	2,080,949	Northeast Ohio Regional Sewer District 6.038%, 11/15/40	3,755	3,951,049

Par

	(000)	Value†
MUNICIPAL BONDS — (continued)	(3.3.3)	
Pennsylvania Economic Development		
Financing Authority, UPMC Revenue		
Bonds		
4.000%, 11/15/42	\$ 3,390	\$ 3,392,373
State of California, Los Angeles Department		
of Water & Power, Power System		
Revenue	г 000	E 227 7E0
6.166%, 07/01/40 State of Texas, Public Finance Authority	5,000	5,226,750
3.952%, 10/01/37	3,500	3,531,780
University of Texas System, Build America	2,500	2,22 1,700
Bond, Series B		
6.276%, 08/15/41	5,020	5,126,273
Total MUNICIPAL BONDS		
(Cost \$23,799,643)		23,618,737
RESIDENTIAL MORTGAGE BACKED SECURITI	ES — 6.3%	
Fannie Mae Pool — 5.9%		
2.500%, 01/01/43	2,303	2,184,637
2.500%, 02/01/43	6,613	6,272,377
3.500%, 09/01/43	1,113	1,119,982
3.000%, 01/01/49 , TBA	15,000	14,620,563
		24,197,559
Freddie Mac Gold Pool — 0.4%		
3.500%, 01/01/41	1,470	1,480,548
TOTAL RESIDENTIAL MORTGAGE BACKED SECURITIES		
(Cost \$25,128,927)		25,678,107
U.S TREASURY OBLIGATION — 5.0%		
U.S. Treasury Bond		
1.625%, 05/15/26	1,500	1,400,742
4.375%, 02/15/38	3,000	3,674,883
2.875%, 05/15/43	3,000	2,928,633
3.625%, 08/15/43	2,000	2,213,828
U.S. Treasury Inflation Indexed Bonds		
1.375%, 01/15/20	5,262	5,228,654
0.625%, 01/15/24	1,084	1,066,868
0.375%, 07/15/25	960	925,226
1.000%, 02/15/46	2,668	2,529,370
U.S. Treasury Note	600	500 110
2.000%, 07/31/22 <sup>(a)</sup>	600	590,110
Total U.S TREASURY OBLIGATION		
(Cost \$20,941,715)		20,558,314

	Number of Shares	Value†
SHORT-TERM INVESTMENTS — 1.3%		
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$5,511,772)	5,511,772	\$ 5,511,772
TOTAL INVESTMENTS — 104.0% (Cost \$432,595,242)		425,330,242
Other Assets & Liabilities — (4.0)%		(16,302,998)
TOTAL NET ASSETS — 100.0%	!	\$409,027,244

See Security Valuation Note.

144A @ Security exempt from registration under Rule 144A of the Securities Act of 1933, as amended. At December 31, 2018, the aggregate value of Rule 144A securities was \$149,437,842, which represents 36.5% of the Fund's net assets.

- Variable rate security. The rate disclosed is the rate in effect on the report date. The information in parenthesis represents the benchmark and reference rate for each relevant security and the rate floats based upon the reference rate and spread. The security may be further subject to interest rate floors and caps. For loan agreements, the rate shown may represent a weighted average interest rate. Certain variable rate securities are not based on a published reference rate and spread, but are determined by the issuer or agent and are based on current market conditions, or, for mortgage-backed securities, are impacted by the individual mortgages which are paying off over time. These securities do not indicate a reference rate and spread in their descriptions.
- (a) All or portion of securities segregated as collateral for futures contracts.

CLO — Collateralized Loan Obligation.

ICE — Intercontinental Exchange.

LIBOR — London Interbank Offered Rate.

LLC — Limited Liability Company.

LP — Limited Partnership.

PLC — Public Limited Company.

REMICS — Real Estate Mortgage Investment Conduits.

TBA — To Be Announced Security.

#### Country Weightings as of 12/31/2018 #

United States	89%
Cayman Islands	4
Canada	3
Bangladesh	1
Cote D'Ivoire (Ivory Coast)	1
Finland	1
United Kingdom	1
Total	100%

††% of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE										
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input						
U.S. TREASURY										
OBLIGATION	\$ 20,558,314	\$ —	\$ 20,558,314	\$						
ASSET BACKED										
SECURITIES	48,481,485	_	48,481,485	_						
COMMERCIAL										
MORTGAGE										
BACKED										
SECURITIES	79,311,862	_	79,311,862	_						
CORPORATE BONDS	222,169,965	_	222,169,965	_						
MUNICIPAL BONDS	23,618,737	_	23,618,737	_						
RESIDENTIAL										
MORTGAGE										
BACKED										
SECURITIES	25,678,107	_	25,678,107	_						
SHORT-TERM										
INVESTMENTS	5,511,772	5,511,772								
TOTAL INVESTMENTS	\$425,330,242	\$5,511,772	\$419,818,470	\$						
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup>										
Futures Contracts	\$ 2,386,304	\$2,386,304	\$ —	\$						
TOTAL ASSETS — OTHER FINANCIAL										
INSTRUMENTS	\$ 2,386,304	\$2,386,304	\$ —	\$ <u>-</u>						

<sup>(1)</sup> Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as future contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

### **Futures Contracts:**

Туре	Futures Contract	Expiration Date	Numbers of Contracts	Units per Contract	Closing Price	Notional Value	Unrealized Appreciation	Unrealized Depreciation
Buy/Long	US Treasury 2 year Note	3/29/2019	240	2,000	\$106	\$50,955,000	\$ 318,324	\$ —
Buy/Long	US Treasury 5 year Note	3/29/2019	200	1,000	115	22,937,500	356,247	_
Buy/Long	US Treasury Long Bond	3/29/2019	30	1,000	146	4,380,000	200,800	_
Buy/Long	US Treasury Ultra Bond	3/29/2019	220	1,000	161	35,344,375	1,510,933	
Total							\$2,386,304	<u>\$ —</u>

	Number of Shares	Value†		Par (000)	Value†
COMMON STOCKS — 0.0%					
Entertainment — 0.0%  New Cotai Participation, Class B*(1)  (Cost \$24,225)	1	\$ 4,96 <u>5</u>	Commercial Services — (continued) Harland Clarke Holdings Corp. 6.875%, 03/01/20 144A @ Jaguar Holding Co. II/Pharmaceutical	\$ 125	\$ 121,87
	Par (000)		Product Development LLC 6.375%, 08/01/23 144A @	1,000	957,00
PREFERRED STOCKS — 0.8%			Prime Security Services Borrower LLC 9.250%, 05/15/23 144A @	783	807,46
Oil & Gas — 0.8% Targa Resources Corp. CONV	\$ 1,175	1 254 475	Service Corp International		,
	\$ 1,175	1,254,475	7.500%, 04/01/27 United Rentals North America, Inc.	1,500	1,620,00
Packaging and Containers — 0.0% Smurfit-Stone Container Corp.			6.500%, 12/15/26	750	738,75
(Escrow) CONV.(1)	725	0	Western Digital Corp.		
TOTAL PREFERRED STOCKS			4.750%, 02/15/26	1,000	867,50
(Cost \$1,304,279)		1,254,475			6,263,59
CORPORATE BONDS — 92.4%			Diversified Financial Services — 1.9%		
· · · · · · · · · · · · · · · · · · ·			Fly Leasing Ltd. 5.250%, 10/15/24	335	302,33
Advertising — 0.7% Outfront Media Capital LLC			LPL Holdings, Inc.	333	302,33
5.625%, 02/15/24	1,000	985,000	5.750%, 09/15/25 144A @	825	773,43
Airlines — 2.1%			Springleaf Finance Corp. 7.125%, 03/15/26	1,000	892,50
American Airlines 2013-1 Class B			Vantiv LLC/Vantiv Issuer Corp.	.,000	0,2,50
Pass Through Trust	4 454	4.450.434	4.375%, 11/15/25 144A @	1,000	915,00
5.625%, 01/15/21 144A @ American Airlines 2013-2 Class B	1,151	1,159,134			2,883,27
Pass Through Trust			Electric — 5.9%		
5.600%, 07/15/20 144A @	1,958	1,972,500	AES Corp.	4.000	4 045 00
		3,131,634	6.000%, 05/15/26 DPL, Inc.	1,000	1,015,00
Banks — 2.0%			7.250%, 10/15/21	1,500	1,567,32
CIT Group, Inc.	1 000	005 000	Itron, Inc.	4.000	0.45.00
6.125%, 03/09/28 ING Groep N.V.	1,000	995,000	5.000%, 01/15/26 144A @ NRG Energy, Inc.	1,000	915,00
(USD Swap Semi 30/360 5 Yr + 5.124%)			7.250%, 05/15/26	1,500	1,556,25
6.875%, 04/16/66 •	1,000	993,750	Resideo Funding, Inc.		
UBS Group Funding Switzerland AG (USD Swap Semi 30/360 5 Yr + 5.883%)			6.125%, 11/01/26 144A @ Sensata Technologies BV	1,000	985,00
7.125%, 08/10/66 •	1,000	1,014,128	5.625%, 11/01/24 144A @	1,000	985,00
		3,002,878	Vistra Energy Corp.		
Building Materials — 0.1%			8.000%, 01/15/25 144A @ Vistra Operations Co., LLC	1,000	1,060,00
Norbord, Inc.			5.500%, 09/01/26 144A @	750	721,87
6.250%, 04/15/23 144A @	225	225,362			8,805,44
Chemicals — 1.0%			Energy-Alternate Sources — 0.6%		
GCP Applied Technologies, Inc. 5.500%, 04/15/26 144A @	1,500	1,462,500	TerraForm Power Operating LLC		
_	1,500	1,402,500	5.000%, 01/31/28 144A @	1,089	958,32
Coal — 0.9% Alliance Resource Operating Partners LP			Entertainment — 4.9%		
7.500%, 05/01/25 144A @	1,354	1,357,385	AMC Entertainment Holdings, Inc.	750	660.00
Commercial Services — 4.2%			5.750%, 06/15/25 Cedar Fair LP/Canada's Wonderland	750	660,00
Aramark Services, Inc.			Co./Magnum Management Corp.		
5.000%, 02/01/28 144A @	1,000	932,500	5.375%, 06/01/24	1,000	977,50
Booz Allen Hamilton, Inc. 5.125%, 05/01/25 144A @	230	218,500			
- 2-7-1-1-2 - 11.00	200	0,500			

	Par (000)		Value†		Par (000)	Value†
CORPORATE BONDS — (continued)						
Entertainment — (continued)				Healthcare Services — (continued)		
Cinemark USA, Inc.				WellCare Health Plans, Inc.		
4.875%, 06/01/23	\$ 600	) \$	576,000	5.375%, 08/15/26 144A @	\$ 75	0 \$ 723,750
Downstream Development Authority of the Quapaw Tribe of Oklahoma 10.500%,						6,948,932
02/15/23 144A @	350	)	344,750	Housewares — 0.9%		
Eldorado Resorts, Inc.			2 ,	American Greetings Corp.	4.5	
6.000%, 09/15/26 144A @	750	)	708,750	8.750%, 04/15/25 144A @	1,50	0 1,357,500
International Game Technology PLC				Insurance — 0.2%		
6.500%, 02/15/25 144A @	1,315	)	1,295,275	CNO Financial Group, Inc.	3.	0 257.475
Penn National Gaming, Inc. 5.625%, 01/15/27 144A @	2,000	1	1,790,000	5.250%, 05/30/25	27	257,175
Six Flags Entertainment Corp.	2,000	,	1,7 50,000	Internet — 1.2%		
4.875%, 07/31/24 144A @	1,000	)	942,500	Netflix, Inc.	4.00	043.500
		_	7,294,775	4.875%, 04/15/28 Zayo Group LLC	1,00	912,500
Forming and all Control 100%		_	.,,	6.375%, 05/15/25	1,00	930,000
Environmental Control — 0.6% Waste Pro USA, Inc.					,	1,842,500
5.500%, 02/15/26 144A @	1,000	)	920,000			
-	,	_		Iron & Steel — 1.3%  Joseph T Ryerson & Son, Inc.		
Food — 1.4% Lamb Weston Holdings, Inc.				11.000%, 05/15/22 144A @	69	700,213
4.875%, 11/01/26 144A @	1,000	)	960,000	Steel Dynamics, Inc.	-	,
Land O' Lakes, Inc.	,		2 7	5.000%, 12/15/26	1,30	1,231,750
7.000%, 12/15/66 144A @	1,000	)	975,000			1,931,963
Post Holdings, Inc.				Leisure Time — 1.1%		
8.000%, 07/15/25 144A @	175	· _	182,875	Silversea Cruise Finance Ltd.		
		_	2,117,875	7.250%, 02/01/25 144A @	1,50	1,585,800
Gas — 0.6%				Lodging — 0.8%		
NiSource, Inc.				Boyd Gaming Corp.		
(UST Yield Curve CMT 5 Yr + 2.843%)				6.000%, 08/15/26	1,00	935,000
5.650%, 12/15/66 144A @, •	1,000	) —	930,000	Seminole Hard Rock Entertainment, Inc.	2.0	200 250
Healthcare Products — 1.3%				5.875%, 05/15/21 144A @	30	
Hill-Rom Holdings, Inc. 5.750%, 09/01/23 144A @	1,000	1	1,000,000			1,234,250
Sotera Health Holdings LLC	1,000	,	1,000,000	Machinery — Diversified — 2.3%		
6.500%, 05/15/23 144A @	1,000	)	957,500	Mueller Water Products, Inc.		
_		_	1,957,500	5.500%, 06/15/26 144A @ RBS Global, Inc./Rexnord LLC	1,00	970,000
Hoolth care Cornices 46%		_	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4.875%, 12/15/25 144A @	1,50	0 1,361,250
Healthcare Services — 4.6% Centene Corp.				Stevens Holding Co., Inc.	.,,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
5.375%, 06/01/26 144A @	1,000	)	972,500	6.125%, 10/01/26 144A @	1,20	1,182,000
DaVita, Inc.	,		,			3,513,250
5.125%, 07/15/24	450	)	421,875	Media — 8.2%		
5.000%, 05/01/25	450	)	408,375	Altice France S.A.		
HCA, Inc.	1 500	`	1,458,750	6.250%, 05/15/24 144A @	1,00	932,500
5.375%, 09/01/26 MPH Acquisition Holdings LLC	1,500	,	1,430,730	AMC Networks, Inc.		
7.125%, 06/01/24 144A @	1,125	5	1,049,062	4.750%, 08/01/25	1,00	907,500
Polaris Intermediate Corp. PIK	, -		, ,	CCO Holdings LLC/CCO Holdings Capital Corp.		
(Cash coupon 8.50%)				5.500%, 05/01/26 144A @	1,2	0 1,182,337
8.500%, 12/01/22 144A @	1,000	)	912,120	5.125%, 05/01/27 144A @	1,00	
Tenet Healthcare Corp. 8.125%, 04/01/22	1,000	1	1,002,500	CSC Holdings LLC		_
0. 123%, U4/U 1/22	1,000	,	1,002,300	5.375%, 07/15/23 144A @	1,00	
				7.750%, 07/15/25 144A @ 10.875%, 10/15/25 144A @	78 1,72	,
				.5.57 5/6, 10/15/25 11/11/00	1,7	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

	Par (000)	Value†		Par (000)	Value†
CORPORATE BONDS — (continued)					
Media — (continued)			Oil & Gas — (continued)		
Sirius XM Radio, Inc.			Transocean, Inc.		
6.000%, 07/15/24 144A @	\$ 1,000	\$ 1,002,500	8.375%, 12/15/21	\$ 1,500	\$ 1,488,750
Telenet Finance Luxembourg Notes Sarl					12,098,575
5.500%, 03/01/28 144A @	1,000	905,000			
Townsquare Media, Inc.			Oil & Gas Services — 0.9%		
6.500%, 04/01/23 144A @	386	355,120	Archrock Partners LP		
Unitymedia GmbH		,	6.000%, 04/01/21	160	153,600
6.125%, 01/15/25 144A @	625	628,063	6.000%, 10/01/22	1,200	1,128,000
Unitymedia Hessen GmbH & Co. KG		,			1,281,600
5.000%, 01/15/25 144A @	400	390,800	Darkaging and Containous 4.3%		
Univision Communications, Inc.		221,111	Packaging and Containers — 4.3% ARD Finance S.A. PIK		
5.125%, 02/15/25 144A @	300	263,250			
VTR Finance BV	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	205,250	(Cash coupon 7.125%, PIK 7.875%)	025	740 427
6.875%, 01/15/24 144A @	1,150	1,150,000	7.125%, 09/15/23	825	740,437
0.07 5/0, 0.17 15/21 11 17 1	1,150		Ardagh Packaging Finance PLC	4 000	007.500
		12,353,839	7.250%, 05/15/24 144A @	1,000	997,500
Metal Fabricate/Hardware — 0.4%			Berry Global, Inc.		
Zekelman Industries, Inc.			4.500%, 02/15/26 144A @	1,000	915,000
9.875%, 06/15/23 144A @	525	552,563	BWAY Holding Co.		
, , , ,			5.500%, 04/15/24 144A @	1,000	940,000
Mining — 2.6%			Reynolds Group Issuer, Inc.	_	
First Quantum Minerals Ltd.			5.750%, 10/15/20	7	,
7.000%, 02/15/21 144A @	1,000	960,000	5.125%, 07/15/23 144A @	1,000	,
Novelis Corp.			7.000%, 07/15/24 144A @	750	714,375
5.875%, 09/30/26 144A @	1,000	885,000	Sealed Air Corp.		
Teck Resources Ltd.			6.875%, 07/15/33 144A @	1,200	1,197,000
8.500%, 06/01/24 144A @	1,000	1,071,250			6,463,579
TriMas Corp.			Dhawaa aasti aala 45%		
4.875%, 10/15/25 144A @	1,000	922,500	Pharmaceuticals — 1.5%		
		3,838,750	Bausch Health Cos., Inc.	4 000	4 040 000
			7.000%, 03/15/24 144A @	1,000	1,010,000
Miscellaneous Manufacturing — 0.6%			Valeant Pharmaceuticals International	4.350	4 242 500
Amsted Industries, Inc.			8.500%, 01/31/27 144A @	1,250	
5.375% <b>,</b> 09/15/24 144A @	1,000	942,500			2,222,500
Oil & Gas — 8.0%			Pipelines — 7.7%		
Carrizo Oil & Gas, Inc.			Antero Midstream Partners LP/Antero		
8.250%, 07/15/25	1,100	1,078,000	Midstream Finance Corp.		
Covey Park Energy LLC	1,100	1,070,000	5.375%, 09/15/24	1,000	932,500
7.500%, 05/15/25 144A @	1,000	860,000	Blue Racer Midstream LLC/Blue Racer Finance	1,000	<i>332,300</i>
CrownRock LP	.,000	000,000	Corp.		
5.625%, 10/15/25 144A @	1,010	909,000	6.625%, 07/15/26 144A @	1,000	930,000
Denbury Resources, Inc.	1,010	707,000	Cheniere Corpus Christi Holdings LLC	1,000	<i>550</i> ,000
9.000%, 05/15/21 144A @	2,500	2,325,000	7.000%, 06/30/24	1,250	1,318,750
Hess Infrastructure Partners LP/Hess	2,500	2,525,000	5.125%, 06/30/27	1,000	
Infrastructure Partners Finance Corp.			Cheniere Energy Partners LP	1,000	744,070
5.625%, 02/15/26 144A @	750	775 675	5.625%, 10/01/26 144A @	750	701,250
Hilcorp Energy I LP/Hilcorp Finance Co.	/30	725,625	Chesapeake Energy Corp.	750	701,230
1 0, 1	1 000	995 000	7.000%, 10/01/24	750	648,750
5.000%, 12/01/24 144A @	1,000	885,000	Crestwood Midstream Partners LP	7 50	070,730
Newfield Exploration Co.	000	882 000	6.250%, 04/01/23	500	481,250
5.375%, 01/01/26	900	882,000	DCP Midstream Operating LP	500	701,230
Parsley Energy LLC/Parsley Finance Corp.	4 000	020.000	6.750%, 09/15/37 144A @	300	295,500
5.375%, 01/15/25 144A @	1,000	920,000	Energy Transfer LP	500	273,300
PDC Energy, Inc.	4 400	4.050.300	7.500%, 10/15/20	1 000	1,040,000
5.750%, 05/15/26	1,180	1,050,200	Midcontinent Express Pipeline LLC	1,000	1,040,000
Sunoco LP/Sunoco Finance Corp.	4 000	075 000	6.700%, 09/15/19 144A @	2,000	2,018,753
4.875%, 01/15/23	1,000	975,000	מון ארדו עו נרו ניס ניסיסיסיסיסיסיסיסיסיסיסיסיסיסיסיסיס	2,000	2,010,733

	Par (000)		Value†		1	Par (000)		Value†
CORPORATE BONDS — (continued)								
Pipelines — (continued)				Telecommunications — 7.4%				
Tallgrass Energy Partners LP				CommScope Technologies LLC				
5.500%, 09/15/24 144A @	\$ 1,350	) \$	1,326,375	6.000%, 06/15/25 144A @	\$	575	\$	523,250
Targa Resources Partners LP				Hughes Satellite Systems Corp.				
6.750%, 03/15/24	1,000	_	1,015,000	5.250%, 08/01/26		1,000		916,250
			11,652,178	Intelsat Jackson Holdings SA				
Real Estate — 4.5%				(6 M LIBOR) 8.500%, 10/15/24 144A @		1,000		970,000
CyrusOne LP/CyrusOne Finance Corp.				Level 3 Financing, Inc.				
5.375%, 03/15/27	1,750	)	1,697,500	5.375%, 01/15/24		1,000		952,500
Equinix, Inc.	1,7 0		1,057,500	Nokia OYJ		4 500		4 533 500
5.875%, 01/15/26	2,000	)	2,015,000	6.625%, 05/15/39		1,500		1,522,500
ESH Hospitality, Inc.	2,000		2,0.5,000	SoftBank Group Corp.		600		550 733
5.250%, 05/01/25 144A @	1,000	)	930,000	5.125%, 09/19/27		600		559,732
Greystar Real Estate Partners LLC	,		22.,	Sprint Communications, Inc.		525		E27.40E
5.750%, 12/01/25 144A @	200	)	195,500	7.000%, 08/15/20 11.500%, 11/15/21		525 110		537,495 124,575
MGM Growth Properties Operating				Sprint Corp.		110		124,373
Partnership LP/MGP Finance Co-Issuer,				7.250%, 09/15/21		525		537,337
Inc.				7.625%, 03/01/26		2,000		1,975,000
4.500%, 01/15/28	1,000	)	875,000	T-Mobile USA, Inc.		2,000		1,575,000
MPT Operating Partnership LP				6.375%, 03/01/25		750		757,500
6.375%, 03/01/24	250	)	256,250	Telesat Canada/Telesat LLC		750		7 57 ,500
The Howard Hughes Corp.				8.875%, 11/15/24 144A @		385		400,400
5.375%, 03/15/25 144A @	710	)	667,400	ViaSat, Inc.		,,,,		,
VICI Properties 1 LLC				5.625%, 09/15/25 144A @		380		349,600
8.000%, 10/15/23	169	_	181,675	Virgin Media Secured Finance PLC				,
			6,818,325	5.500%, 08/15/26 144A @		1,000		924,850
Retail — 1.7%								11,050,989
KFC Holding Co./Pizza Hut Holdings/Taco							_	1 1,000,000
Bell of America LLC				Transportation — 0.6%				
5.250%, 06/01/26 144A @	1,000	)	967,500	H&E Equipment Services, Inc.		4 000		047.500
L Brands, Inc.	.,000		507,500	5.625%, 09/01/25		1,000	_	917,500
5.250%, 02/01/28	750	)	641,250	TOTAL CORPORATE BONDS				
New Red Finance, Inc.			, , ,	(Cost \$144,991,730)			_1;	38,861,286
4.250%, 05/15/24 144A @	1,000	)	920,000					
_		_	2,528,750	LOAN AGREEMENTS — 4.8%‡				
		_	2,520,750	Commercial Services — 0.5%				
Semiconductors — 0.9%				Financial & Risk U.S. Holdings, Inc.				
Advanced Micro Devices, Inc.				(12 M LIBOR + 3.750%) 6.272%,				
7.000%, 07/01/24	565	)	580,538	10/01/25 •		750		712,500
Qorvo, Inc.	0.57		044.750	Entertainment — 0.6%				
5.500%, 07/15/26 144A @	850	, <u> </u>	811,750	CCM Merger, Inc.				
			1,392,288	0.000%, 08/06/21 •		971		941,078
Software — 2.5%						,,,	_	711,070
ACI Worldwide, Inc.				Insurance — 1.0%				
5.750%, 08/15/26 144A @	750	)	736,875	Asurion LLC				
CDK Global, Inc.				(12 M LIBOR + 6.500%) 9.022%,		1 405		1 175 206
4.875%, 06/01/27	675	5	626,062	08/04/25 •		1,495	_	1,475,386
First Data Corp.				Lodging — 0.6%				
5.750% <b>,</b> 01/15/24 144A @	1,500	)	1,462,500	Golden Nugget, Inc.				
IQVIA, Inc.				0.000%, 10/04/23 •		958	_	919,806
5.000%, 10/15/26 144A @	1,000	) _	955,000	Packaging and Containers — 0.5%				
			3,780,437	Ball Metalpack Finco LLC				
		_	. ,	(12 M LIBOR + 8.750%)				
				11.272%, 07/31/26 •		750		736,252
							_	

	-	Par 100)		Value†
LOAN AGREEMENTS‡ — (continued)				
Pharmaceuticals — 0.6%  Valeant Pharmaceuticals/Bausch Health Co., Inc. (12 M LIBOR + 3.000%) 5.379%, 06/02/25 •	Ś	963	¢	917,320
Telecommunications — 1.0% Digicel International Finance Ltd.	4	,,,,	<u>+</u>	7.7,520
(3 M LIBOR + 3.250%) 5.960%, 05/27/24 • Intelsat Jackson Holdings S.A.		267		241,296
(6 M LIBOR + 6.625%) 6.625%, 01/02/24		1,300		1,277,250
			_	1,518,546
TOTAL LOAN AGREEMENTS‡				
(Cost \$7,450,238)			_	7,220,888
		mber hares		
SHORT-TERM INVESTMENTS — 1.3%				
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares				
(Cost \$1,934,988)	1,9	34,988	_	1,934,988
TOTAL INVESTMENTS — 99.3% (Cost \$155,705,460)			1	49,276,602
Other Assets & Liabilities — 0.7%				1,047,345
TOTAL NET ASSETS — 100.0%			\$1	50,323,947

- (1) The value of this security was determined using significant unobservable inputs and is reported as a Level 3 security in the Valuation Hierarchy table located at the end of the Schedule of Investments.
- † See Security Valuation Note.
- Loan Agreements in which the Fund invests generally pay interest at rates which are periodically predetermined by reference to a base lending rate plus a premium. These base lending rates are generally (i) the Prime Rate offered by one or more major U.S. banks, (ii) the lending rate offered by one or more European banks such as the London Interbank Offered Rate ("LIBOR") or (iii) the Certificate of Deposit rate. Rate shown represents the actual rate at December 31, 2018. Loan Agreements, while exempt from registration under the Security Act of 1933, as amended (the "1933 Act"), contain certain restrictions on resale and cannot be sold publicly. Floating rate Loan Agreements often require repayments from excess cash flow or permit the borrower to repay at its election. The degree to which borrowers repay, whether as a contractual requirement or at their election, cannot be predicted with accuracy. As a result, the actual remaining maturity may be substantially less than the stated maturity
- Non-income producing security.

- 144A @ Security exempt from registration under Rule 144A of the Securities Act of 1933, as amended. At December 31, 2018, the aggregate value of Rule 144A securities was \$86,078,107, which represents 57.3% of the Fund's net assets.
- Variable rate security. The rate disclosed is the rate in effect on the report date. The information in parenthesis represents the benchmark and reference rate for each relevant security and the rate floats based upon the reference rate and spread. The security may be further subject to interest rate floors and caps. For loan agreements, the rate shown may represent a weighted average interest rate. Certain variable rate securities are not based on a published reference rate and spread, but are determined by the issuer or agent and are based on current market conditions, or, for mortgage-backed securities, are impacted by the individual mortgages which are paying off over time. These securities do not indicate a reference rate and spread in their descriptions.

CMT — Constant Maturity Treasury.

CONV — Convertible Security.

LIBOR — London Interbank Offered Rate.

LLC — Limited Liability Company.

PIK — Payment in Kind Security.

LP — Limited Partnership.

PLC — Public Limited Company.

#### Country Weightings as of 12/31/2018 #

United States	85%
Canada	4
Luxembourg	3
Netherlands	2
Cayman Islands	1
Finland	1
United Kingdom	1
Other	3
Total	100%

††% of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE

Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input	
COMMON STOCKS	\$ 4,965	\$ —	\$ —	\$4,965	
PREFERRED STOCKS	1,254,475	1,254,475	_	_	
CORPORATE BONDS	138,861,286	_	138,861,286	_	
LOAN AGREEMENTS	7,220,888	_	7,220,888	_	
SHORT-TERM					
INVESTMENTS	1,934,988	1,934,988	_	_	
TOTAL INVESTMENTS	\$149,276,602	\$3,189,463	\$146,082,174	\$4,965	

Following is a reconciliation of Level 3 investments for which significant unobservable inputs were used to determine fair value:

	Investments in Securities (Market Value)				
Balance as of 12/31/2017 Transfer Out Level 3	\$ 1,323,902 (1,318,937)				
Balance as of 12/31/2018	\$ 4,965				

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 fair value hierarchy during the reporting period.

A security held by the Fund with an end of period value of \$1,254,475 was transferred from Level 3 to Level 1 due to an increase in trading activities at period end. The prior year end price used was a broker quote with unobservable inputs. As of the end of the period management obtained a price from an independent third party pricing vendor.

The accompanying notes are an integral part of these financial statements.

	Par (000)	,	Value†		Number of Shares	Value†
ASSET BACKED SECURITIES — 0.4%						
Continental Airlines 2009-2 Class A, Pass Through Trust 7.250%, 05/10/21 Continental Airlines 2012-1 Class A, Pass	\$ 483	\$	495,592	Environmental Control — 1.9% Republic Services, Inc. Waste Connections, Inc.	380,652 593,097	\$ 27,441,203 44,037,452 71,478,655
Through Trust 4.150%, 10/11/25 Domino's Pizza Master Issuer LLC	1,612		1,607,556	Gas — 1.5% NiSource, Inc.	2,109,091	53,465,457
2017-1A A23 4.118%, 07/25/47 144A @ Domino's Pizza Master Issuer LLC 2018-1A A2I	4,952		4,852,127	Healthcare Products — 4.5% Becton Dickinson & Co. Thermo Fisher Scientific, Inc.	368,269 378,845	82,978,371 84,781,723
4.116%, 07/25/48 144A @ Wendy's Funding LLC 2018-1A A21	4,652		4,589,154	,	37 6,6 13	167,760,094
3.573%, 03/15/48 144A @  TOTAL ASSET BACKED SECURITIES	3,179		3,046,458	Healthcare Services — 3.0% Anthem, Inc. UnitedHealth Group, Inc.	167,600 262,300	44,016,788 65,344,176
(Cost \$14,754,829)		1	14,590,887	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	109,360,964
	Number of Shares			Insurance — 3.5%	4.637.444	
COMMON STOCKS — 66.0%				Marsh & McLennan Cos., Inc.	1,627,444	129,788,659
Auto Parts & Equipment — 2.3% Aptiv PLC	491,101	3	30,237,088	Internet — 7.3% Alphabet, Inc., Class A*	16,699	17,449,787
Lear Corp. Magna International, Inc.	218,509 599,942	2	26,846,016 27,267,364	Alphabet, Inc., Class C* Amazon.com, Inc.*	70,223 69,037	72,723,641 103,691,503
magna international, inc.	222,212		34,350,468	Booking Holdings, Inc.* Facebook, Inc., Class A*	13,500 403,500	23,252,670 52,894,815
Banks — 1.4%					2,5	270,012,416
The PNC Financial Services Group, Inc.	443,166	5	51,810,537			270,012,110
Beverages — 0.4% Keurig Dr Pepper, Inc.	519,266	1	13,313,980	<b>Machinery - Diversified — 1.5</b> % Roper Technologies, Inc.	209,437	55,819,149
Commercial Services — 3.0%				Miscellaneous Manufacturing — 4.6%	4 074 340	110 161 000
Equifax, Inc.	413,553		88,514,191	Danaher Corp. General Electric Co.	1,071,218 7,826,616	110,464,000 59,247,483
S&P Global, Inc.	421,677	7	1,659,789	deneral Electric co.	7,020,010	169,711,483
		11	10,173,980			105,711,405
Computers — 0.4% Apple, Inc.	91,700	1	14,464,758	Oil & Gas — 0.4% Concho Resources, Inc.*	151,600	15,582,964
••	31,700		11,101,750	Pharmaceuticals — 1.2%		
Diversified Financial Services — 3.9% Intercontinental Exchange, Inc.	472,591	3	35,600,280	Abbott Laboratories	635,691	45,979,530
Mastercard, Inc., Class A Visa, Inc., Class A	73,571	1	13,879,169	Pipelines — 0.7%		
visa, iiic., Class A	715,431	_	94,393,966 13,873,415	Enterprise Products Partners LP  Retail — 1.2%	1,107,261	27,227,548
Electric — 4.7%				McDonald's Corp.	124,158	22,046,736
American Electric Power Co., Inc.	613,925	4	15,884,755	Yum! Brands, Inc.	243,107	22,346,395
DTE Energy Co.	210,274		23,193,222			44,393,131
Duke Energy Corp.	238,639		20,594,546	Samilar dustana 2.4%		
Eversource Energy NextEra Energy, Inc.	305,152 132,071		19,847,086 22,956,581	Semiconductors — 3.4%  Maxim Integrated Products, Inc.	896,809	45,602,738
Xcel Energy, Inc.	843,966		1,582,205	Texas Instruments, Inc.	840,396	79,417,422
			4,058,395	,	,	125,020,160
Electronics — 6.2%			_	Software — 9.0%		
Fortive Corp.	984,821	6	66,632,989	Fidelity National Information Services,		
PerkinElmer, Inc.	1,515,262		19,023,830	Inc.	894,791	91,760,817
TE Connectivity Ltd.	598,763		15,284,446	Fiserv, Inc.*	1,257,918	92,444,394
		23	30,941,265			

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Software — (continued)		
Intuit, Inc.	145,708	\$ 28,682,620
Microsoft Corp.	1,166,900	118,522,033
		331,409,864
TOTAL COMMON STOCKS		2 420 006 972
(Cost \$2,225,490,250)		2,439,996,872
	Par	
	(000)	
REAL ESTATE INVESTMENT TRUSTS —		
Diversified — 1.3%		
American Tower Corp.		
(Cost \$40,348,157)	\$ 292,665	46,296,676
•		
	Number of	
	Shares	
PREFERRED STOCKS — 4.7%		
Banks — 1.8%		
JPMorgan Chase & Co.	325,000	8,134,750
State Street Corp.	19,850	499,426
U.S. Bancorp	175,000	4,320,750
U.S. Bancorp, Series F●	71,000	1,880,080
Wells Fargo & Co.	39,450	49,784,717
		64,619,723
Diversified Financial Services — 0.1%		
The Charles Schwab Corp. Series C	150,000	3,808,500
The Charles Schwab Corp. Series D	12,000	300,000
	,	4,108,500
		1,100,500
Electric — 1.3%	100.000	2 274 000
Alabama Power Co.	100,000	2,374,000
CMS Energy Corp.	500,000	
DTE Energy Co.	340,000	7,565,000
Duke Energy Corp.	340,000	8,092,000
NextEra Energy, Inc.	73,986	4,264,553
SCE Trust III	14,730	283,994
SCE Trust III • SCE Trust IV •	161,355	3,733,755
	340,000	6,902,000 2,088,000
SCE Trust VI	100,000 75,000	, ,
SCE Trust VI	73,000	1,364,250
		48,697,552
Electronics — 0.3%		
Fortive Corp.	10,921	9,918,998
Gas — 0.2%		
NiSource, Inc. •	325,000	8,138,000
Healthcare Products — 1.0%		
Becton Dickinson & Co., CONV	640,943	36,963,183
	0 10,5 15	
TOTAL PREFERRED STOCKS		173 445 056
(Cost \$173,326,959)		172,445,956

		Par (000)	Value†
CORPORATE BONDS — 21.3%			
Aerospace & Defense — 0.2%			
Northrop Grumman Corp.	_	5.020	+ 5720.403
2.550%, 10/15/22	\$	5,930	\$ 5,738,182
Agriculture — 0.3%			
Philip Morris International, Inc. 2.000%, 02/21/20		3,420	2 277 210
(3 M ICE LIBOR + 0.420%)		5,420	3,377,319
3.066%, 02/21/20 •		2,285	2,281,830
2.625%, 02/18/22		4,270	4,133,179
			9,792,328
Airlines — 0.1%			
Continental Airlines Pass Through Trust			
2012-1 Class B			
6.250%, 10/11/21		206	208,980
Delta Air Lines 2009-1, Class A, Pass			
Through Trust			
7.750%, 06/17/21		205	211,372
Delta Air Lines 2011-1, Class A , Pass Through Trust			
5.300%, 10/15/20		265	266,113
U.S. Airways 2010-1 Class A, Pass Through		20)	200,119
Trust			
6.250%, 10/22/24		1,274	1,345,771
U.S. Airways 2012-2 Class A, Pass Through			
Trust		402	400.654
4.625%, 12/03/26 U.S. Airways 2012-2 Class B, Pass Through		193	199,654
Trust			
6.750%, 12/03/22		394	411,438
U.S. Airways 2013-1 Class A, Pass Through			, -
Trust			
3.950%, 05/15/27		4	3,617
U.S. Airways 2013-1 Class B, Pass Through Trust			
5.375%, 05/15/23		4	3,960
3.37 3.6, 637 .3723			2,650,905
D 1 24%			2,000,000
Banks — 3.1% Kreditanstalt fuer Wiederaufbau			
2.875%, 04/03/28		85,260	85,544,092
State Street Corp. •		05,200	05,511,052
(3 M ICE LIBOR + 3.600%)			
5.250%, 12/29/49		4,360	4,278,250
(3 M ICE LIBOR + 2.540%)			
5.625%, 12/15/66		9,005	8,509,725
The Bank of New York Mellon Corp. •			
(3 M ICE LIBOR + 3.130%) 4.625%, 12/29/49		3,175	2,845,594
(3 M ICE LIBOR + 3.420%)		2,172	2,015,551
4.950%, 12/29/49		5,800	5,655,000
The PNC Financial Services Group, Inc.			
(3 M ICE LIBOR + 3.300%)			
5.000%, 12/29/49 •		7,085	6,518,200
U.S. Bancorp (3 M ICE LIBOR + 2 910%)			
(3 M ICE LIBOR + 2.910%) 5.300%, 04/15/49 •		3,010	2,829,400
2.2000, 0 11 121 12		2,010	
			116,180,261

	Par (000)	Value†		Par (000)	Value†
CORPORATE BONDS — (continued)	(000)	value		(000)	value
Beverages — 0.2%			Electric — (continued)		
Anheuser-Busch InBev Finance, Inc.			Fortive Corp.		
2.650%, 02/01/21	\$ 826 \$	812,285	1.800%, 06/15/19	\$ 40 :	39,522
(3 M ICE LIBOR + 1.260%)			NSTAR Electric Co.	2 445	2 220 744
3.819%, 02/01/21 •	3,820	3,840,914	3.200%, 05/15/27 Sensata Technologies BV	3,415	3,328,744
3.300%, 02/01/23	2,175	2,114,858	5.625%, 11/01/24 144A @	880	866,800
	_	6,768,057	The Southern Co.	000	000,000
Building Materials — 0.0%			1.850%, 07/01/19	1,770	1,761,327
Lennox International, Inc.			Virginia Electric & Power Co.	,	,,.
3.000%, 11/15/23	760	715,168	3.150%, 01/15/26	1,525	1,472,713
Charriagh 0.4%	-	<u> </u>	3.500%, 03/15/27	3,010	2,964,323
Chemicals — 0.1%			Wisconsin Public Service Corp.		
Ecolab, Inc. 2.000%, 01/14/19	2,330	2,329,109	3.350%, 11/21/21	2,025	2,044,769
2.000%, 01/14/19	2,550 _	2,329,109	Xcel Energy, Inc.		
Commercial Services — 0.7%			4.000%, 06/15/28	3,340	3,378,192
Aramark Services, Inc.				_	48,473,113
5.000%, 04/01/25 144A @	6,315	6,172,912	Electronics — 0.1%		
5.000%, 02/01/28 144A @	2,310	2,154,075	Amphenol Corp.		
Moody's Corp.	6.050	6.076.643	2.200%, 04/01/20	2,585	2,546,745
4.250%, 02/01/29 Refinitiv US Holdings, Inc.	6,850	6,976,642	3.200%, 04/01/24	1,290	1,250,836
6.250%, 05/15/26 144A @	5,610	5,413,650			3,797,581
8.250%, 11/15/26 144A @	7,345	6,711,494	F. J. a. J. a. a. a. J	-	2,. 2. ,2 - :
0.250%, 11/15/20 11/1/10	7,515 _		Entertainment — 0.3%		
	-	27,428,773	Cedar Fair LP/Canada's Wonderland Co./Magnum Management Corp.		
Computers — 0.3%			5.375%, 06/01/24	4,315	4,217,912
Apple, Inc.			Cedar Fair LP/Canada's Wonderland	1,515	1,217,712
1.500%, 09/12/19	10,920	10,824,095	Co./Magnum Management		
Cosmetics & Personal Care — 0.1%			Corp./Millennium Op		
Unilever Capital Corp.			5.375%, 04/15/27	5,850	5,528,250
3.000%, 03/07/22	2,305	2,288,025	Six Flags Entertainment Corp.		
Diversified Financial Services — 0.0%	_		4.875%, 07/31/24 144A @	1,775	1,672,938
Caterpillar Financial Services Corp.			5.500%, 04/15/27 144A @	640	603,200
2.250%, 12/01/19	1,155	1,146,805			12,022,300
, , ,	.,	1,110,005	Environmental Control — 0.0%		
Electric — 1.3%			Waste Connections, Inc.		
American Electric Power Co., Inc.	700	705.050	4.250%, 12/01/28	1,630	1,665,666
3.650%, 12/01/21	780	785,858		· -	
4.300%, 12/01/28	2,835	2,880,698	Food — 0.6% B&G Foods, Inc.		
Berkshire Hathaway Energy Co. 2.400%, 02/01/20	2,550	2,533,350	4.625%, 06/01/21	2,525	2,461,875
Dominion Energy, Inc., STEP	2,550	2,333,330	Conagra Brands, Inc.	2,525	2, 10 1,07 5
2.962%, 07/01/19	350	348,755	(3 M ICE LIBOR + 0.750%)		
DTE Energy Co.	330	5 10,755	3.219%, 10/22/20 •	1,710	1,705,196
3.700%, 08/01/23	2,060	2,045,577	3.800%, 10/22/21	3,750	3,751,322
3.800%, 03/15/27	8,575	8,366,508	Nestle Holdings, Inc.		
Edison International			3.100%, 09/24/21 144A @	14,330	14,413,020
2.125%, 04/15/20	4,300	4,185,814	The Kroger Co.		
Eversource Energy			2.000%, 01/15/19	1,330	1,329,404
2.750%, 03/15/22	2,550	2,505,757			23,660,817
3.800%, 12/01/23	1,255	1,267,087	Gas — 0.5%	-	
2.900%, 10/01/24	1,700	1,629,219	NGL Energy Partners LP		
3.300%, 01/15/28	4,219	4,001,462	5.125%, 07/15/19	995	987,538
4.250%, 04/01/29	2,030	2,066,638	NiSource, Inc.	)))	,0,,,,,
			3.490%, 05/15/27	9,445	9,012,838
			2: 12:17 :21 :21 :1	2,112	2,3.2,000

	Par (000)	Value†		Par (000)	Value†
CORPORATE BONDS — (continued)					
Gas — (continued)			Lodging — 0.1%		
NiSource, Inc.			Hilton Domestic Operating Co., Inc.		
4.375%, 05/15/47 \$	3,965	\$ 3,688,615	4.250%, 09/01/24	\$ 2,445	\$ 2,310,525
(UST Yield Curve CMT 5 Yr + 2.840%) 5.650%, 12/15/66 144A @, •	5,825	5,417,250	Machinery - Diversified — 0.3%		
3.030%, 12/13/00 177A (w, °	),02)		Roper Technologies, Inc.		
		19,106,241	3.650%, 09/15/23	4,120	4,122,985
Healthcare Products — 0.8%			4.200%, 09/15/28	3,700	3,663,138
Becton Dickinson & Co.			Welbilt, Inc.		
2.675%, 12/15/19	1,895	1,876,981	9.500%, 02/15/24	3,095	3,311,650
(3 M ICE LIBOR + 1.030%) 3.769%, 06/06/22 •	3,685	3,612,190	Xylem, Inc.	445	420 542
3.363%, 06/06/24	5,782	5,553,478	4.875%, 10/01/21	415	428,513
Hologic, Inc.	5,702	کررور ا	3.250%, 11/01/26	640	608,167
4.375%, 10/15/25 144A @	4,550	4,231,500			12,134,453
Medtronic Global Holdings SCA			Media — 2.3%		
1.700%, 03/28/19	4,300	4,288,941	CCO Holdings LLC/CCO Holdings Capital		
Medtronic, Inc.			Corp.		
2.500%, 03/15/20	2,845	2,830,434	5.250%, 03/15/21	1,900	1,901,188
Teleflex, Inc. 4.875%, 06/01/26	3,030	2,893,650	5.250%, 09/30/22	7,165	7,102,306
4.625%, 11/15/27	3,630	3,366,825	5.750%, 09/01/23	3,600	3,582,000
1.025/6, 1.1/1.5/27	5,050		5.750%, 01/15/24 5.125%, 05/01/27 144A @	4,225 17,325	4,182,750 16,136,505
		28,653,999	5.000%, 02/01/28 144A @	25,486	23,447,120
Healthcare Services — 0.7%			Charter Communications Operating LLC	25,100	25,117,120
Fresenius Medical Care U.S. Finance, Inc.	4.425	4 450 750	3.579%, 07/23/20	2,225	2,222,601
5.750%, 02/15/21 144A @	1,125	1,158,750	Comcast Corp.	,	, ,
HCA, Inc. 4.250%, 10/15/19	3,781	3,771,547	(3 M ICE LIBOR + 0.330%)		
6.500%, 02/15/20	18,920	19,393,000	3.127%, 10/01/20 •	3,405	3,389,293
3.500%, 02/15/20	10,520	24,323,297	3.300%, 10/01/20	6,930	6,956,506
		24,323,297	(3 M ICE LIBOR + 0.440%)	2.600	2 664 470
Household Products & Wares — 0.2%			3.237%, 10/01/21 •	2,690	2,664,478
Reckitt Benckiser Treasury Services PLC			3.450%, 10/01/21 Sirius XM Radio, Inc.	3,145	3,176,887
(3 M ICE LIBOR + 0.560%) 3.384%, 06/24/22 144A @,•	4,140	4,067,767	6.000%, 07/15/24 144A @	2,780	2,786,950
Spectrum Brands, Inc.	4,140	4,007,707	Unitymedia GmbH	2,7 00	2,7 00,750
6.625%, 11/15/22	2,711	2,744,888	6.125%, 01/15/25 144A @	7,879	7,917,607
6.125%, 12/15/24	1,500	1,443,750	-		85,466,191
		8,256,405			
		0,230,103	Miscellaneous Manufacturing — 0.1%		
Insurance — 0.2%			3M Co. 3.000%, 09/14/21	2.460	2 470 992
Marsh & McLennan Cos., Inc. 2.350%, 03/06/20	1,205	1,194,317	3.000%, 09/14/21	2,460	2,479,882
2.750%, 01/30/22	1,705	1,671,134	Oil & Gas — 0.2%		
3.300%, 03/14/23	525	519,110	EQT Corp.		. =0= = <=
Trinity Acquisition PLC			8.125%, 06/01/19	1,754	1,783,762
4.400%, 03/15/26	2,400	2,384,917	Shell International Finance BV (3 M ICE LIBOR + 0.450%)		
		5,769,478	3.068%, 05/11/20 •	6,720	6,729,002
Internet — 3.3%	•		J.000%, 05/11/20 ·	0,720	
Amazon.com, Inc.					8,512,764
2.600%, 12/05/19	4,155	4,144,465	Packaging and Containers — 0.7%		
Netflix, Inc.			Reynolds Group Issuer, Inc.	45.622	15 593 064
5.875%, 02/15/25	7,510	7,575,713	5.750%, 10/15/20 6.875%, 02/15/21	15,622 2,736	15,582,961 2,735,912
4.375%, 11/15/26	17,665	16,030,988	(3 M ICE LIBOR + 3.500%)	2,750	2,7 3 3, 3 12
4.875%, 04/15/28	33,608	30,667,300	5.936%, 07/15/21 144A @, •	4,875	4,856,719
5.875%, 11/15/28 144A @ 6.375%, 05/15/29 144A @	32,365 18,670	31,449,070 18,413,287	5.125%, 07/15/23 144A @	4,145	3,948,112
8.575%, 05/15/29 144A (ω Zayo Group LLC	10,070	,20/,כו ד,טו		-	27,123,704
5.750%, 01/15/27 144A @	14,205	12,677,963			
, , , , <u>C</u>	,	120,958,786			
		.20,770,700			

Software		Par (000)	Value†		Par (000)	Value†
Elanco Animal Health, Inc.	CORPORATE BONDS — (continued)					
3.9121.08/27/21 144A @	Pharmaceuticals — 0.3%			Software — 0.8%		
4.272, 68/28/23 144A @ 4,004 4,008 4,008/28/28 144A @ 2,455,079 14,0008,08/28/28 144A @ 1,2008,08/28/28 144A @ 1,2008,08/28/28/28/28/28/28/28/28/28/28/28/28/28	Elanco Animal Health, Inc.			Fiserv, Inc.		
4,900%, 08/28/28 144A @ 4,008 4,100.831 4,200%, 1q01/28 5,2460 2,455,070 5,000%, 03/01/24 144A @ 18,086 19,261,590 29,335,514 10,500%, 03/01/21 144A @ 18,086 19,261,590 29,300%, 03/15/21 29,30		3,505	\$ 3,526,808	2.700%, 06/01/20	5,175	\$ 5,136,535
Solera LLC		,	1,678,579	3.800%, 10/01/23	2,460	2,475,319
Pipelines — 0.1X	4.900%, 08/28/28 144A @	4,030	4,100,831	4.200%, 10/01/28	2,460	2,455,070
Pipelines			9,306,218			
Enterprise Products Operating LLC   3,300%, 20/102/102   3,415   3,424,044   Telecommunications — 0.4%   Level 3 Financing, inc.   Level 3 Financing, inc.   S. 375%, 08/15/22   2,975   2,922,937	Pipelines — 0.1%			10.500%, 03/01/24 144A @	18,086	19,261,590
3,400, 0,2011/22   3,415   3,424,044   Telecommunications — 0.4x   Level Financine, in C.	-					29,328,514
NuStar Logistics LP		3,415	3,424,044	Telecommunications — 0.4%		
### ### ### ### ### ### ### ### ### ##		,	-, ,			
Real Estate — 1.0% American Tower Corp. 3.00%, 02/15/21 3.057 3.500%, 02/15/21 3.057 3.500%, 02/15/21 3.057 3.500%, 02/15/21 3.057 3.500%, 02/15/21 3.057 3.500%, 02/15/20 3.058 3.054,499 3.0758, 03/16/22 3.08 (3.0 1/16/22) 3.08 (3.0 1/16/22) 4.00%, 10/15/28 4.00%, 10/15/28 510 521,392 520, 03/15/22 520, 03/15/22 520, 03/15/23 520, 03/15		1,650	1,617,000	٥,	3,500	3,431,680
Name			5 041 044		,	
Real Estate — 1.0%   4,271,337   3,30%, 02/15/21   3,55   3,554,993   3,1554,093   3,788%, 09/15/22   4,300   4,271,337   4,300   4,271,337   3,00%, 02/15/21   3,555   3,554,993   3,788%, 09/15/22   4,300   4,304,687   4,309,641   4,300%, 10/15/28   4,300%,	- 1		2,011,011		,,,,,,	,- ,:
American Hower only					4,300	4,271,337
Camden Property Trust	·	2 575	2 554 402		,-	, ,
Cannoter-Property 1918   14,930,641   14,9		3,5/5	3,554,493	,	4,300	4,304,687
Crown Castle International Corp.         7,850 (A9175)22         8,077,519 (Cost \$807,285,357)         788,817,079         788,817,		545	524 202	,	,-	
4.875%, 04/15/22   7.850   8.077,519   (Cost 8807,285,3577)   788,817,079   785,817,079   752,525%, 01/15/23   13,865   14,397,748   14,875%, 07/15/22   11,060   10,866,450   37,417,602   14,875%, 07/15/22   11,060   37,417,602   148 Fuller Co.   12 Mit E LIBOR + 2.000%)   4.470%, 10/20/24   2,225   2,087,813   2,500%, 04/15/21   1,915   1,872,618   1,872,618   1,872,618   1,872,618   1,915   1,872,618   1,815   1,915   1,815   1,815   1,915   1,915		515	521,392			14,930,041
S.250%, 01/15/23   13,865   14,397,748   SBA Communications Corp.   11,060   10,866,450   37,417,602   HB Fuller Co.   Chemicals — 0.1%   Chemicals — 0.1%   Chemicals — 0.1%   HB Fuller Co.   Chemicals — 0.1%   Chemical		7.950	9 077 540			
SBA Communications Corp.   11,060   10,866,450   37,417,602   HB Fuller Co.   Chemicals — 0.1%   C		,		(Cost \$807,285,357)		788,817,079
Control   Cont		13,865	14,397,748			
Retail — 1.8%	·	11 060	10 866 450	LOAN AGREEMENTS — 2.7%‡		
Retail — 1.8%	4.073%, 07/13/22	11,000		Chemicals — 0.1%		
AutoZone, Inc.  1.625%, 04/21/19 1.625%, 04/21/19 2.500%, 04/15/21  Dollar Tree, Inc. (3 M ICE LIBOR + 0.700%) 3.149%, 04/17/20 • 1,290 3.149%, 04/17/20 • 1,290 3.149%, 04/17/20 • 1,290 8ell of Americal LLC \$5.00%, 06/01/24 144A @ 3,680 \$5.500%, 06/01/24 144A @ 4,893 4.750%, 06/01/27 144A @ 17,900 4.750%, 06/			37,417,602	HB Fuller Co.		
1.625%, 04/21/19 2.500%, 04/15/21 1,915 1,872,618 1,872,670 1,872,618 1,872,618 1,872,618 1,872,670 1,872,618 1,872,670 1,872,618 1,872,618 1,872,618 1,872,670 1,872,	Retail — 1.8%			(12 M ICE LIBOR + 2.000%)		
2.500%, 04/15/21 1,915 1,872,618   Collimertal Services — 0.7.8   Financial & Risk U.S. Holdings, Inc.   (12 M ICE LIBOR + 0.700%) 3.149%, 04/17/20 • 1,290 1,281,772   Trans Union LLC • (12 M ICE LIBOR + 3.750%) (3 M ICE LIBOR + 0.700%) 3.149%, 04/17/20 • 1,290 1,281,772   Trans Union LLC • (12 M ICE LIBOR + 1.750%) (6.272%, 10/10/125 • 14,010 13,309,500   (12 M ICE LIBOR + 1.750%) (13 M ICE LIBOR + 1.750%) (14 M ICE LIBOR + 2.000%) (15 M ICE LIBOR + 0.310%) 3.048%, 03/01/122 • 2,435 2,410,492 3.250%, 03/01/122 • 2,435 2,410,492 3.250%, 03/01/122 • 2,040,968 (3 M ICE LIBOR + 3.750%) (3 M ICE LIBOR + 1.750%) (3 M ICE LIBOR + 3.750%) (3 M ICE LIBOR + 1.750%) (3 M ICE LIBOR + 3.750%) (3 M ICE LIBOR + 3.750%) (3 M ICE LIBOR + 3.750%) (3 M ICE LIBOR + 1.750%) (3 M ICE LIBOR + 2.750%) (	AutoZone, Inc.			4.470%, 10/20/24 •	2,225	2,087,813
2.500%, 04/15/21 1,915 1,872,618 Financial & Risk U.S. Holdings, Inc. (12 M ICE LIBOR + 1.750%) 3.149%, 04/17/20 • 1,290 1,281,772  KFC Holding Co./Pizza Hut Holdings/Taco Bell of America LLC 5.000%, 06/01/24 144A @ 3,680 3,551,200 4.750%, 06/01/24 144A @ 4,893 4,733,978 4.550%, 06/01/26 144A @ 17,900 16,647,000  The Home Depot, Inc. (3 M ICE LIBOR + 0.310%) 3.048%, 03/01/22 2,435 2,410,492 3.250%, 03/01/22 2,020 2,020 2,040,968 3.887%, 11/01/20 7,505 7,354,900 3.8875%, 11/01/21 12,855 12,533,625 3.875%, 11/01/23 4,505 4,257,225 6.875%, 11/01/23 4,505 4,257,225 6.875%, 11/01/23 4,505 4,257,225 6.875%, 11/01/23 3,540 3,469,200 5.350%, 11/01/43 6,155 5,108,650 67,848,150  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,400 1,407,000 PLC 6.250%, 02/15/26 144A @ 1,400 1,400 1,400,000  4 368,000  1,400 1,407,000 4 368,000  1,400 1,407,000 4 368,000  1,400 1,407,000 4 368,000  1,	1.625%, 04/21/19	365	363,216	Commercial Services — 0.7%		
Dollar Tree, Inc. (3 M ICE LIBOR + 0.700%)   3.149%, 04/17/20 * 1,290   1,281,772   1,28	2.500%, 04/15/21	1,915	1,872,618			
(3 M ICE LIBOR + 0.700%) 3.149%, 04/17/20 * 1,290 1,281,772	Dollar Tree, Inc.					
3.149%, 04/17/20 • 1,290 1,281,772  KFC Holding Co./Pizza Hut Holdings/Taco Bell of America LLC 5.000%, 06/01/24 144A @ 3,680 3,551,200 (12 M ICE LIBOR + 1.750%) 5.250%, 06/01/26 144A @ 4,893 4,733,978 4.522%, 06/19/25 5,786 5,568,953 4.750%, 06/01/27 144A @ 17,900 16,647,000  The Home Depot, Inc. (3 M ICE LIBOR + 0.310%) 3.048%, 03/01/22 • 2,435 2,410,492 3.250%, 03/01/22 • 2,020 2,040,968 (3 M ICE LIBOR + 3.750%) 3.048%, 03/01/22 • 2,020 2,040,968 (3 M ICE LIBOR + 3.750%) 3.875%, 11/01/20 7,505 7,354,900 6.553%, 10/16/24 69 67,564 5.300%, 09/15/19 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/21 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 5.350%, 11/01/43 6,155 5,108,650 6.7,848,150  Semiconductors — 0.1%  Semiconductors — 0.1%  Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 4,368,000  4 368,000  1,400 1,407,000 4 368,000  1,400 1,407,000 4 368,000	•				14.010	13.309.500
Commonwealth   Comm		1,290	1,281,772		. 1,0 .0	.5,505,500
Sell of America LLC   S.000%, 06/01/24 144A @   3,680   3,551,200   (12 M ICE LIBOR + 2.000%)   (13 M ICE LIBOR + 2.000%)   (14 M ICE LIBOR + 2.000%)   (15 M ICE LIBOR + 3.750%)   (15 M ICE LIBOR + 1.500%)   (15 M ICE LIBOR						
5.000%, 06/01/24 144A @ 3,680 3,551,200 (12 M ICE LIBOR + 2.000%) 4.750%, 06/01/27 144A @ 4,893 4,733,978 4.522%, 06/19/25 5,786 5,568,953 4.750%, 06/01/27 144A @ 17,900 16,647,000  The Home Depot, Inc. (3 M ICE LIBOR + 0.310%) 3.048%, 03/01/22 • 2,435 2,410,492 Institutional Shareholder Services, Inc. • (3 M ICE LIBOR + 3.750%)  Yum! Brands, Inc. 5.300%, 09/15/19 2,215 2,223,306 (3 M ICE LIBOR + 3.750%) 3.875%, 11/01/20 7,505 7,354,900 6.553%, 10/16/24 762 741,337 3.750%, 11/01/21 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 6.875%, 11/15/37 3,540 3,469,200 3.940%, 01/16/23 • 2,445 2,397,078 5.350%, 11/01/43 6,155 5,108,650 67,848,150  Semiconductors — 0.1% Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,400 4388,000  4.889 3,978 4.522%, 06/19/25 5,786 5,568,953 4.522%, 06/19/25 5,786  1.500%, 02/15/26 144A @ 1,400 1,400 4388,000  4.502%, 06/19/25 5,786 5,568,953 4.522%, 06/19/25 5,786  5.768,953 5.786 5,568,953 4.522%, 06/19/25 5,786 5.786,953 5.786 5,568,953 4.522%, 06/19/25 5,708 5.5786, 11/06/24 69 67,564 6.517%, 10/16/24 69 67,564 6.517%, 10/16/24 762 741,337 762 741,337 762 741,337 762 741,337 762 741,337 762 741,337 763 3,940 3,469,200 763 3,940%, 01/16/23 • 2,445 2,397,078 764 3,299,078 765 3,399,079 765 3,399,079 767 3,349,000 767 3,349,0					8,181	7,864,123
5.250%, 06/01/26 144A (@ 4,893 4,735,978 4.522%, 06/19/25 5,786 5,568,953 4.750%, 06/01/27 144A (@ 17,900 16,647,000 16,647,000 17,900 16,647,000 17,900 16,647,000 17,900 16,647,000 17,900 17,900 17,900 17,900 18,875%, 11/01/20 17,900 18,750 17,900 18,750%, 06/19/25 12,533,625 12,533,625 12,533,625 11/01/23 12,855 12,533,625 12,533,625 12,533,625 11/01/23 12,855 12,533,625 12,533,625 11/01/23 12,855 12,533,625 12,5		,			,	.,,
The Home Depot, Inc.  (3 M ICE LIBOR + 0.310%)  3.048%, 03/01/22 • 2,435 2,410,492 Institutional Shareholder Services, Inc. • 3.250%, 03/01/22 2,020 2,040,968 (3 M ICE LIBOR + 3.750%)  Yum! Brands, Inc.  5.300%, 09/15/19 2,215 2,223,306 6.517%, 10/16/24 69 67,564  5.300%, 09/15/19 2,215 2,223,306 6.553%, 10/16/24 762 741,337  3.750%, 11/01/20 7,505 7,354,900 6.553%, 10/16/24 762 741,337  3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%)  6.875%, 11/15/37 3,540 3,469,200 3.940%, 01/16/23 • 2,445 2,397,078  5.350%, 11/01/43 6,155 5,108,650 67,848,150 Entertainment — 0.1%  Semiconductors — 0.1%  Sensata Technologies BV  5.000%, 10/01/25 144A @ 3,150 2,961,000 Sensata Technologies UK Financing Co.  PLC  6.250%, 02/15/26 144A @ 1,400 1,400 4 368,000 4 368,000 Prestige Brands, Inc.  (12 M ICE LIBOR + 2.000%)					5,786	5,568,953
Diversified Financial Services — 0.1%		17,900	16,647,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2,1	
3.048%, 03/01/22 • 2,435 2,410,492 Institutional Shareholder Services, Inc. • 3.250%, 03/01/22 2,020 2,040,968 (3 M ICE LIBOR + 3.750%)  Yum! Brands, Inc. 6.517%, 10/16/24 69 67,564 5.300%, 09/15/19 2,215 2,223,306 (3 M ICE LIBOR + 3.750%) 3.875%, 11/01/20 7,505 7,354,900 6.553%, 10/16/24 762 741,337 3.750%, 11/01/21 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 6.875%, 11/15/37 3,540 3,469,200 3.940%, 01/16/23 • 2,445 2,397,078 5.350%, 11/01/43 6,155 5,108,650 67,848,150  Semiconductors — 0.1%  Semiconductors — 0.1%  Semiconductors — 0.1%  Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,407,000 4368,000  4.368,000  Institutional Shareholder Services, Inc. • (3 M ICE LIBOR + 3.750%) (5.53%, 10/16/24 762 741,337  762 741,337  762 741,337  762 741,337  763 3,997,078  768 754,900 6.553%, 10/16/24 762 762  769 769 769 769 769 769 769 769 769 769	• •					20,742,370
3.250%, 03/01/22  Yum! Brands, Inc.  5.300%, 09/15/19  2,215  2,223,306  3.875%, 11/01/20  3.875%, 11/01/21  12,855  12,533,625  Vantiv LLC  3.875%, 11/01/23  4,505  4,257,225  6.875%, 11/15/37  5.350%, 11/01/43  Semiconductors — 0.1%  Semiconductors — 0.1%  Sensata Technologies BV  5.000%, 10/01/25 144A @  Sensata Technologies UK Financing Co. PLC  6.250%, 02/15/26 144A @  1,400  1,400  4 368 000  4 368 000  4 368 000  4 3 IN ICE LIBOR + 3.750%)  6.517%, 10/16/24  6.5517%, 10/16/24  762  741,337  741,						
Yum! Brands, Inc. 5.300%, 09/15/19 2,215 2,223,306 3.875%, 11/01/20 3.7505 7,354,900 3.875%, 11/01/21 12,855 12,533,625 7,354,900 6.553%, 10/16/24 762 741,337 3.750%, 11/01/21 12,855 12,533,625 7,354,900 6.553%, 10/16/24 762 741,337 750%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 6.875%, 11/15/37 3,540 3,469,200 6.875%, 11/15/37 5.350%, 11/01/43 6,155 5,108,650 67,848,150 Entertainment — 0.1% Formula Oe Management Term Loan B3 (12 M ICE LIBOR + 2.500%) 5.000%, 10/01/25 144A @ 3,150 2,961,000 Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,407,000 4 368,000  4 368,000  6 5,51%, 10/16/24 6 6,557%, 10/16/24 762 741,337	,			,		
5.300%, 09/15/19 2,215 2,223,306 3.875%, 11/01/20 7,505 7,354,900 6.553%, 10/16/24 762 741,337 3.750%, 11/01/21 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 6.875%, 11/15/37 3,540 3,469,200 5.350%, 11/01/43 6,155 5,108,650 67,848,150 Entertainment — 0.1% Formula Oe Management Term Loan B3 (12 M ICE LIBOR + 2.500%) 5.000%, 10/01/25 144A @ 3,150 Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,407,000 4 368,000  (12 M ICE LIBOR + 2.000%) Prestige Brands, Inc. (12 M ICE LIBOR + 2.000%)		2,020	2,040,968			
3.875%, 11/01/20 7,505 7,354,900 6.553%, 10/16/24 762 741,337 3.750%, 11/01/21 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 6.875%, 11/15/37 3,540 3,469,200 3.940%, 01/16/23 • 2,445 2,397,078 5.350%, 11/01/43 6,155 5,108,650 67,848,150 Entertainment — 0.1%  Semiconductors — 0.1% Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000 5.022%, 02/01/24 • 4,225 3,985,569  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 4 368,000 4 368,000 4 368,000 4 368,000		2 245	2 222 206		69	67,564
3.750%, 11/01/21 12,855 12,533,625 Vantiv LLC 3.875%, 11/01/23 4,505 4,257,225 (12 M ICE LIBOR + 1.500%) 6.875%, 11/15/37 3,540 3,469,200 3.940%, 01/16/23 • 2,445 2,397,078 5.350%, 11/01/43 6,155 5,108,650 67,848,150 Entertainment — 0.1%  Semiconductors — 0.1% Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000 5.002%, 02/01/24 • 4,225 3,985,569  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 4 368,000 4 368,000 4 368,000 Prestige Brands, Inc. (12 M ICE LIBOR + 2.000%)				, , , , , , , , , , , , , , , , , , , ,		
3.875%, 11/01/23					762	741,337
6.875%, 11/15/37 3,540 3,469,200 3.940%, 01/16/23 • 2,445 2,397,078 5.350%, 11/01/43 6,155 5,108,650 67,848,150 Entertainment — 0.1%  Semiconductors — 0.1%  Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000 5.002%, 02/01/24 • 4,225 3,985,569  Sensata Technologies UK Financing Co. PLC Household Products & Wares — 0.0%  PLC Household Products & Wares — 0.0%  Prestige Brands, Inc. (12 M ICE LIBOR + 2.000%)						
5.350%, 11/01/43 6,155 6,155 6,108,650 67,848,150 Entertainment — 0.1%  Semiconductors — 0.1% Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000 Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 4 368,000  Frestige Brands, Inc. (12 M ICE LIBOR + 2.000%) Prestige Brands, Inc. (12 M ICE LIBOR + 2.000%)						
Semiconductors — 0.1%  Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,407,000 4 368,000  Entertainment — 0.1%  Formula Oe Management Term Loan B3 (12 M ICE LIBOR + 2.500%) 5.022%, 02/01/24 ◆ 4,225 3,985,569  Household Products & Wares — 0.0%  Prestige Brands, Inc. (12 M ICE LIBOR + 2.000%)				3.940%, 01/16/23 •	2,445	2,397,078
Semiconductors — 0.1%  Sensata Technologies BV  5.000%, 10/01/25 144A @ 3,150 2,961,000  Sensata Technologies UK Financing Co. PLC  6.250%, 02/15/26 144A @ 1,400 4 368,000  Semiconductors — 0.1%  Formula Oe Management Term Loan B3  (12 M ICE LIBOR + 2.500%)  5.022%, 02/01/24 ● 4,225 3,985,569  Household Products & Wares — 0.0%  Prestige Brands, Inc.  (12 M ICE LIBOR + 2.000%)	5.550%, 11/01/45	0,155				3,205,979
Semiconductors — 0.1%       Formula Oe Management Term Loan B3         Sensata Technologies BV       (12 M ICE LIBOR + 2.500%)       4,225       3,985,569         Sensata Technologies UK Financing Co. PLC       Household Products & Wares — 0.0%         6.250%, 02/15/26 144A @       1,400       1,407,000       Prestige Brands, Inc.       (12 M ICE LIBOR + 2.000%)			67,848,150	Entertainment — 0.1%		
Sensata Technologies BV 5.000%, 10/01/25 144A @ 3,150 2,961,000  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 4 368,000  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 4 368,000  1,400 4 368,000  (12 M ICE LIBOR + 2.500%) 5.022%, 02/01/24 • 4,225 3,985,569  Household Products & Wares — 0.0% Prestige Brands, Inc. (12 M ICE LIBOR + 2.000%)	Semiconductors — 0.1%					
5.000%, 10/01/25 144A @ 3,150 2,961,000 5.022%, 02/01/24 • 4,225 3,985,569  Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400 1,407,000 4 368,000 4 368,000 4 368,000 (12 M ICE LIBOR + 2.000%)	Sensata Technologies BV					
Sensata Technologies UK Financing Co. PLC 6.250%, 02/15/26 144A @ 1,400	5.000%, 10/01/25 144A @	3,150	2,961,000		4.225	3,985,569
6.250%, 02/15/26 144A @ 1,400 1,407,000 Prestige Brands, Inc.  4.368,000 (12 M ICE LIBOR + 2.000%)	Sensata Technologies UK Financing Co.				1,227	
4 368 000 (12 M ICE LIBOR + 2.000%)	PLC					
4 368 000	6.250%, 02/15/26 144A @	1,400	1,407,000			
4.522%, 01/26/24 • 256 246,152			4,368,000		356	246 453
				4.022%, U1/20/24 •	256	246,152

	Par (000)	Value†	Value	e†
LOAN AGREEMENTS — (continued)				
Insurance — 0.8% HUB International Ltd (3 M ICE LIBOR + 2.750%) 5.240%, 04/25/25 •	\$ 30,497	\$ 28,733,733	TOTAL INVESTMENTS — 100.2% (Cost \$3,510,547,433) \$3,705,33 Other Assets & Liabilities — (0.2)% (7,08	37,765 37,530)
	\$ JU, TJ/	۲۵,755,755	TOTAL NET ASSETS — 100.0% \$3,698,25	0,235
Internet — 0.2%  Zayo Group LLC •  0.00%, 01/19/21	2,394	2,326,592	Number of Contracts Value	et
(12 M ICE LIBOR + 2.250%) 4.772%, 01/19/24	4,225	4,036,396	WRITTEN OPTIONS	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-, -	6,362,988	Call Options	
Oil & Gas — 0.1% Eagleclaw Midstream Ventures LLC/BCP Raptor LLC (6 M ICE LIBOR + 4.250%)			TOTAL WRITTEN OPTIONS (See open written options schedule) (Premiums \$(23,897,767)) (40,017) (13,94)	12 <b>,</b> 582)
6.492%, 06/24/24 •	5,898	5,492,539	† See Security Valuation Note.	
Pharmaceuticals — 0.3% Change Healthcare Holdings LLC (12 M ICE LIBOR + 2.750%)			<ul> <li>Non-income producing security.</li> <li>144A@ Security exempt from registration under Rule 144A of the Securities Act of 1933, as amended. At December 31, 201</li> </ul>	8, the
5.273%, 03/01/24 • NVA Holdings, Inc. (12 M ICE LIBOR + 2.750%)	8,759	8,287,967	<ul> <li>aggregate value of Rule 144A securities was \$244,872,414</li> <li>which represents 6.6% of the Fund's net assets.</li> <li>Variable rate security. The rate disclosed is the rate in effective forms.</li> </ul>	ect
5.273%, 02/02/25 •	3,280	3,083,107	on the report date. The information in parenthesis repres	
		11,371,074	the benchmark and reference rate for each relevant secu and the rate floats based upon the reference rate and spi	•
Software — 0.3%  Cypress Intermediate Holdings III, Inc. (12 M ICE LIBOR + 3.000%) 5.530%, 04/29/24 ●  Kronos, Inc.	4,192	3,972,110	The security may be further subject to interest rate floors caps. For loan agreements, the rate shown may represen weighted average interest rate. Certain variable rate secuare not based on a published reference rate and spread, lare determined by the issuer or agent and are based on	s and It a urities
(3 M ICE LIBOR + 3.000%) 5.541%, 11/01/23 •	9,014	8,547,790 12,519,900	current market conditions, or, for mortgage-backed secu are impacted by the individual mortgages which are payir over time. These securities do not indicate a reference ra	ng off
Telecommunications — 0.0% Crown Subsea Communications Holding, Inc. (12 M ICE LIBOR + 6.000%) 8.350%, 11/03/25 •	915	877,256	and spread in their descriptions.  ‡ Loan Agreements in which the Fund invests generally pay interest at rates which are periodically predetermined by reference to a base lending rate plus a premium. These bas lending rates are generally (i) the Prime Rate offered by or more major U.S. banks, (ii) the lending rate offered by one	ne or
TOTAL LOAN AGREEMENTS (Cost \$106,844,244)		101,625,579	more European banks such as the London Interbank Offer Rate ("LIBOR") or (iii) the Certificate of Deposit rate. Rate shown represents the actual rate at December 31, 2018. Lo	ed
U.S TREASURY OBLIGATION — 2.1%			Agreements, while exempt from registration under the Se	
United States Treasury Note 2.250%, 11/15/27 (Cost \$80,481,091)	82,350	79,548,170	Act of 1933, as amended (the "1933 Act"), contain certain restrictions on resale and cannot be sold publicly. Floating Loan Agreements often require repayments from excess c	rate :ash
	Number of Shares		flow or permit the borrower to repay at its election. The de to which borrowers repay, whether as a contractual requirement or at their election, cannot be predicted with	O
SHORT-TERM INVESTMENTS — 1.7%			accuracy. As a result, the actual remaining maturity may be	ž
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares T. Rowe Price Investment, Ltd.	14,834,156 47,182,390	14,834,156 47,182,390	substantially less than the stated maturity shown.  CMT — Constant Maturity Treasury.  CONV — Convertible Security.  ICE — Intercontinental Exchange.	
TOTAL SHORT-TERM INVESTMENTS (Cost \$62,016,546)		62,016,546	LIBOR — London Interbank Offered Rate. LLC — Limited Liability Company.	

LP — Limited Partnership.
PLC — Public Limited Company.
STEP — Step Coupon Bond.

Country Weightings as of 12/31/2018 #

United States	93%
Germany	3
Canada	2
Switzerland	1
United Kingdom	1
Total	100%

††% of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

	ASSE	TS TABLE		
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
ASSET BACKED SECURITIES COMMON STOCK REAL ESTATE	\$ 14,590,887 2,439,996,872	\$ — 2,439,996,872	\$ 14,590,887	\$—
INVESTMENT TRUSTS PREFERRED STOCK	46,296,676	46,296,676	_	_
Banks Diversified Financial	64,619,723	64,619,723	_	_
Services	4,108,500	4,108,500	_	
Electric	48,697,552	48,697,552	_	
Electronics	9,918,998	9,918,998	_	_
Gas Healthcare	8,138,000	8,138,000	_	_
Products	36,963,183	36,963,183		<u> </u>
TOTAL PREFERRED STOCKS	172,445,956	172,445,956	_	_
U.S. TREASURY				
OBLIGATION	79,548,170	_	79,548,170	
CORPORATE BONDS	788,817,079	_	788,817,079	
LOAN AGREEMENTS SHORT-TERM	101,625,579	_	101,625,579	_
INVESTMENTS	62,016,546	62,016,546		
TOTAL INVESTMENTS	\$3,705,337,765	\$2,720,756,050	\$984,581,715	\$

## Open Written Options Call Options

Description
Abbott Laboratories
Abbott Laboratories
Alphabet Inc.

Description

	LIABILIT	IES TABLE		
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup> Written Options	\$(13,942,582)	\$(13,942,582)	)	<b>\$</b> —
TOTAL LIABILITIES- OTHER FINANCIAL INSTRUMENTS	\$(13,942,582)	\$(13,942,582)	)	\$—

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

# of Contracts	Notional	Exercise Price	Expiration Date	Value
1,550	\$ 10,075,000	\$ 65	1/18/2019	\$(1,139,250)
1,885	12,723,750	68	1/18/2019	(999,050)
149	17,880,000	1,200	1/18/2019	(4,321)
148	17,760,000	1,200	1/18/2019	(5,920)
64	8,064,000	1,260	1/18/2019	(960)
18	2,268,000	1,260	1/18/2019	(162)
54	7,020,000	1,300	1/17/2020	(203,580)
47	6,298,000	1,340	1/17/2020	(141,000)

# Open Written Options Call Options

Alphabet Inc.       47       7,050,000       1,500       1/17/2020       (6)         Amazon.com       54       10,800,000       2,000       1/18/2019       (1)         Amazon.com       56       12,880,000       2,300       1/17/2020       (17)         Amazon.com       24       6,000,000       2,500       1/17/2020       (4)         Amazon.com       24       6,240,000       2,600       1/17/2020       (3)         Amazon.com       24       6,480,000       2,700       1/17/2020       (2)	07,160) 63,920) (1,080) 75,504) 49,128) 35,400) 26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
Alphabet Inc.       47       7,050,000       1,500       1/17/2020       (6)         Amazon.com       54       10,800,000       2,000       1/18/2019       (1)         Amazon.com       56       12,880,000       2,300       1/17/2020       (17)         Amazon.com       24       6,000,000       2,500       1/17/2020       (4)         Amazon.com       24       6,240,000       2,600       1/17/2020       (3)         Amazon.com       24       6,480,000       2,700       1/17/2020       (2)	63,920) (1,080) 75,504) 49,128) 35,400) 26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
Amazon.com       54       10,800,000       2,000       1/18/2019       (         Amazon.com       56       12,880,000       2,300       1/17/2020       (17/2020)         Amazon.com       24       6,000,000       2,500       1/17/2020       (4/2000)         Amazon.com       24       6,240,000       2,600       1/17/2020       (3/2000)         Amazon.com       24       6,480,000       2,700       1/17/2020       (2/2000)	(1,080) 75,504) 49,128) 35,400) 26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
Amazon.com       56       12,880,000       2,300       1/17/2020       (17/2020)         Amazon.com       24       6,000,000       2,500       1/17/2020       (4/2000)         Amazon.com       24       6,240,000       2,600       1/17/2020       (3/2000)         Amazon.com       24       6,480,000       2,700       1/17/2020       (2/2000)	75,504) 49,128) 35,400) 26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
Amazon.com       24       6,000,000       2,500       1/17/2020       (4)         Amazon.com       24       6,240,000       2,600       1/17/2020       (3)         Amazon.com       24       6,480,000       2,700       1/17/2020       (2)	49,128) 35,400) 26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
Amazon.com       24       6,240,000       2,600       1/17/2020       (3)         Amazon.com       24       6,480,000       2,700       1/17/2020       (2)	35,400) 26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
Amazon.com 24 6,480,000 2,700 1/17/2020 (20	26,880) 73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
	73,800) 52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
	52,200) 48,740) 75,670) 21,385) 55,600) 04,480)
	48,740) 75,670) 21,385) 55,600) 04,480)
	75,670) 21,385) 55,600) 04,480)
	21,385) 55,600) 04,480)
	04,480)
	04,480)
Anthem Inc. 197 5,122,000 260 1/18/2019 (15)	59,570)
Anthem Inc. 451 12,177,000 270 1/18/2019 (14	47,477)
·	41,085)
	04,250)
Apple Inc. 917 18,340,000 200 1/18/2019	(917)
Booking Holdings Inc. 23 4,370,000 1,900 1/18/2019 (9	(9,660)
	(1,978)
Booking Holdings Inc. 41 9,430,000 2,300 1/18/2019	(205)
Booking Holdings Inc. 16 3,360,000 2,100 1/17/2020 (14	47,424)
Booking Holdings Inc. 16 3,400,000 2,125 1/17/2020 (14	41,600)
Booking Holdings Inc. 16 3,520,000 2,200 1/17/2020 (11)	17,760)
	12,950)
	76,800)
Duke Energy Corp. 499 4,990,000 100 1/17/2020 (6	64,870)
Enterprise Products Partners 3,444 10,332,000 30 1/18/2019 (1)	13,776)
Facebook Inc. 622 11,196,000 180 1/18/2019	(622)
Facebook Inc. 206 4,120,000 200 1/18/2019	(206)
Intercontinental Exchange Inc. 1,325 10,600,000 80 1/18/2019 (19	19,875)
	94,828)
Intuit Inc. 44 1,144,000 260 1/17/2020 (18	18,920)
Intuit Inc. 44 1,188,000 270 1/17/2020 (1)	13,640)
	99,280)
Mastercard Inc. 367 6,789,500 185 1/18/2019 (28)	80,388)
Mastercard Inc. 366 7,137,000 195 1/17/2020 (26	61,690)
Mastercard Inc. 367 7,340,000 200 1/17/2020 (21	11,025)
Microsoft Corp. 1,085 10,850,000 100 1/18/2019 (43)	39,425)
Microsoft Corp. 933 9,796,500 105 1/18/2019 (15)	56,744)
Microsoft Corp. 2,896 31,856,000 110 1/18/2019 (13)	30,320)
Microsoft Corp. 413 5,162,500 125 1/17/2020 (16)	65,200)
Microsoft Corp. 413 5,369,000 130 1/17/2020 (12)	23,900)
Microsoft Corp. 413 5,575,500 135 1/17/2020 (9)	93,338)
NextEra Energy Inc. 1,040 20,800,000 200 1/17/2020 (33)	32,800)
The PNC Financial Services 1,271 16,523,000 130 1/18/2019 (29)	29,233)
The PNC Financial Services 846 13,959,000 165 1/18/2019 (	(1,692)
The PNC Financial Services 84 1,512,000 180 1/18/2019	(756)
Texas Instruments Inc. 633 7,912,500 125 1/18/2019	(633)
Texas Instruments Inc. 634 8,242,000 130 1/18/2019 (	(2,536)
	(9,348)
	77,315)
	18,424)

# Open Written Options Call Options

Description	# of Contracts	Notional	Exercise Price	Expiration Date		Value
Unitedhealth Group	231	\$ 6,006,000	\$260	1/18/2019	\$	(59,136)
Unitedhealth Group	918	24,786,000	270	1/18/2019		(83,538)
Unitedhealth Group	284	8,236,000	290	1/17/2020		(305,300)
Unitedhealth Group	280	8,400,000	300	1/17/2020		(249,200)
Visa Inc.	197	2,068,500	105	1/18/2019		(494,470)
Visa Inc.	197	2,167,000	110	1/18/2019		(425,520)
Visa Inc.	197	2,265,500	115	1/18/2019		(328,202)
Visa Inc.	543	6,516,000	120	1/18/2019		(692,325)
Visa Inc.	534	6,675,000	125	1/18/2019		(427,200)
Visa Inc.	828	11,178,000	135	1/18/2019		(186,300)
Visa Inc.	797	11,158,000	140	1/18/2019		(63,760)
Visa Inc.	1,381	20,715,000	150	1/18/2019		(6,905)
Visa Inc.	337	5,055,000	150	1/17/2020		(239,270)
Visa Inc.	336	5,208,000	155	1/17/2020		(193,872)
Visa Inc.	542	8,672,000	160	1/17/2020		(243,900)
Visa Inc.	206	3,399,000	165	1/17/2020		(72,718)
Yum Brands Inc.	908	8,626,000	95	1/18/2019		(60,836)
Yum Brands Inc.	516	5,160,000	100	1/17/2020		(237,360)
Yum Brands Inc.	516	5,418,000	105	1/17/2020		(165,120)
Total Written Options					\$ (	13,942,582)

	Number of Shares	Value†
AFFILIATED EQUITY FUNDS — 59.0%		
Penn Series Index 500 Fund* (Cost \$21,834,682)	2,120,173	\$ 44,163,211
AFFILIATED FIXED INCOME FUNDS — 41	.1%	
Penn Series Quality Bond Fund* (Cost \$26,264,596)	2,097,459	30,748,755
SHORT-TERM INVESTMENTS — 0.1%		
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$57,447)	57,447	57,447
TOTAL INVESTMENTS — 100.2% (Cost \$48,156,725) Other Assets & Liabilities — (0.2)%		74,969,413 (137,586)
TOTAL NET ASSETS — 100.0%		\$ 74,831,827

<sup>†</sup> See Security Valuation Note.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE

Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
\$44,163,211	\$44,163,211	\$——	\$
30,748,755	30,748,755	_	_
57,447	57,447	_	_
\$74,969,413	\$74,969,413	\$—	\$
	Market Value at 12/31/2018 \$44,163,211 30,748,755 57,447	Market Value at 12/31/2018	Market Value at 12/31/2018         Level 1 Quoted Price         Significant Observable Input           \$44,163,211         \$44,163,211         \$—           30,748,755         30,748,755         —           57,447         57,447         —

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

<sup>\*</sup> Non-income producing security.

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Growth Stock Fund

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 96.8%		· · ·			·
Aerospace & Defense — 4.3%			Gas — 0.9%		
Northrop Grumman Corp.	9,500		Sempra Energy	22,628	\$ 2,448,123
The Boeing Co.	30,721	9,907,523	Healthcare Products — 5.3%		
		12,234,073	Becton Dickinson & Co.	24,122	5,435,169
Agriculture — 1.0%			Intuitive Surgical, Inc.*	9,240	4,425,221
Philip Morris International, Inc.	40,916	2,731,552	Stryker Corp.	33,022	5,176,198
Apparel — 1.1%					15,036,588
NIKE, Inc., Class B	42,837	3,175,935	Healthcare Services — 6.3%		
	12,007	3, ., 3,333	Anthem, Inc.	15,325	4,024,805
Auto Manufacturers — 2.1%	45 430	4 505 433	Centene Corp.*	19,634	2,263,800
Ferrari N.V.	15,139	1,505,422	HCA Healthcare, Inc.	5,831	725,668
Tesla, Inc.*	12,915	4,298,112	Humana, Inc.	3,700	1,059,976
	,	5,803,534	UnitedHealth Group, Inc.	32,075	7,990,524
Auto Parts & Equipment — 0.9%			WellCare Health Plans, Inc.*	7,946	1,875,971
Aptiv PLC	39,889	2,455,966			17,940,744
Banks — 1.1%			Home Builders — 0.4%		
JPMorgan Chase & Co.	13,940	1,360,823	NVR, Inc.*	470	1,145,385
Morgan Stanley	41,423	1,642,422	,	170	1,115,505
,	•	3,003,245	Insurance — 0.8%	.=	
		<u></u>	Chubb Ltd.	17,100	2,208,978
Biotechnology — 2.2%			Internet — 27.5%		
Alexion Pharmaceuticals, Inc.*	20,841	2,029,080	Alibaba Group Holding Ltd. ADR*	36,866	5,053,223
Vertex Pharmaceuticals, Inc.*	25,577	4,238,364	Alphabet, Inc., Class A*	8,386	8,763,034
		6,267,444	Alphabet, Inc., Class C*	8,235	8,528,248
Chemicals — 0.7%			Amazon.com, Inc.*	16,006	24,040,532
DowDuPont, Inc.	36,752	1,965,497	Booking Holdings, Inc.*	3,261	5,616,812
Commoveial Somison 4.0%			Facebook, Inc., Class A*	81,332	10,661,812
Commercial Services — 4.0% Equifax, Inc.	21,017	1,957,313	IAC/InterActive Corp.* Netflix, Inc.*	6,464 14,939	1,183,170 3,998,573
PayPal Holdings, Inc.*	34,241	2,879,326	Symantec Corp.	190,475	3,599,025
S&P Global, Inc.	2,500	424,850	Tencent Holdings Ltd.	158,600	6,356,744
TransUnion	41,155	2,337,604	Uber Technologies, Inc., Class A*(1)#	575	28,044
Worldpay, Inc., Class A*	48,187	3,682,932	( )		77,829,217
		11,282,025			77,029,217
		11,202,025	Lodging — 2.0%		
Computers — 0.8%	42.674	3.456.464	Las Vegas Sands Corp.	37,800	1,967,490
Apple, Inc.	13,671	2,156,464	MGM Resorts International	49,700 23,987	1,205,722
Diversified Financial Services — 9.8%			Wynn Resorts Ltd.	25,907	2,372,554
Ant International Co. Ltd., Class C*(1)#	189,827	1,064,930			5,545,766
Intercontinental Exchange, Inc.	26,646	2,007,243	Machinery - Diversified — 1.3%		
Mastercard, Inc., Class A	41,728	7,871,987	Roper Technologies, Inc.	10,142	2,703,046
TD Ameritrade Holding Corp.	76,007	3,721,303	Wabtec Corp.	14,771	1,037,663
The Charles Schwab Corp.	81,600	3,388,848			3,740,709
Visa, Inc., Class A	72,929	9,622,252	Media — 1.4%		
		27,676,563	The Walt Disney Co.	36,009	3,948,387
Electric — 0.4%			•	20,009	
NextEra Energy, Inc.	7,217	1,254,459	Pharmaceuticals — 1.6%		<b>3</b>
Electronics — 1.4%			Cigna Corp.	19,996	3,797,640
			Eli Lilly & Co.	6,800	786,896
Fortive Corp.	39.170	2,650.242			
Fortive Corp. Honeywell International, Inc.	39,170 9,062	2,650,242 1,197,272			4,584,536
Fortive Corp. Honeywell International, Inc.	39,170 9,062	1,197,272	Retail — 2.6%		4,584,536
•			<b>Retail</b> — <b>2.6</b> % Dollar General Corp.	9,650	4,584,536 1,042,972

Number of

	Number of Shares	Value†
COMMON STOCKS — (continued)		<u> </u>
Retail — (continued)		
Dollarama, Inc.	58,518	\$ 1,391,796
McDonald's Corp.	12,700	2,255,139
·		7,446,834
		7,110,051
Semiconductors — 1.5%	12.601	1.060.069
ASML Holding N.V. NVIDIA Corp.	12,601 18,100	1,960,968 2,416,350
WIDIA COIP.	10, 100	
		4,377,318
Software — 15.2%		
Activision Blizzard, Inc.	25,886	1,205,511
Electronic Arts, Inc.*	29,759	2,348,283
Fidelity National Information Services, Inc.	22,333	2,290,249
Fiserv, Inc.* Intuit, Inc.	28,572 19,574	2,099,756 3,853,142
Microsoft Corp.	145,129	14,740,753
Red Hat, Inc.*	22,072	3,876,726
salesforce.com, Inc.*	27,908	3,822,559
ServiceNow, Inc.*	9,422	1,677,587
Splunk, Inc.*	17,059	1,788,636
VMware, Inc., Class A	17,855	2,448,456
Workday, Inc., Class A*	18,481	2,951,046
		43,102,704
Water — 0.2%		
American Water Works Co., Inc.	5,900	535,543
TOTAL COMMON STOCKS		
(Cost \$225,924,101)		273,745,103
PREFERRED STOCKS — 1.4%		
Internet — 0.4%		
Uber Technologies, Inc., Series A,		
CONV*(1)#	82	4,000
Uber Technologies, Inc., Series B,	220	40.720
CONV*(1)# Uber Technologies, Inc., Series C-1,	220	10,730
CONV*(1)#	58	2,829
Uber Technologies, Inc., Series C-2,	90	2,027
CONV*(1)#	47	2,292
Uber Technologies, Inc., Series C-3,		
CONV*(1)#	1	49
Uber Technologies, Inc., Series D,		
CONV*(1)#	52	2,536
Uber Technologies, Inc., Series E, CONV*(1)#	25	1 210
Uber Technologies, Inc., Series G,	23	1,219
CONV*(1)#	12,545	611,848
Uber Technologies, Inc., Series G-1,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,
CONV*(1)#	126	6,145
Uber Technologies, Inc., Series Seed,		
CONV*(1)#	210	10,242
Xiaoju Kuaizhi, Inc. (didi), CONV*(1)#	11,920	559,048
		1,210,938
Lodging — 0.5%		
Airbnb, Inc., Series D, CONV*(1)#	9,999	1,061,194

	Number of Shares	Value†
Lodging — (continued) Airbnb, Inc., Series E, CONV*(1)#	3,694	\$ 392,044
All bilb, inc., series L, colvv (1)#	کرن ا	
		1,453,238
Real Estate — 0.2%		
WeWork Companies, Inc., Class A, CONV*(1)#	329	17,045
WeWork Companies, Inc., Series E,	727	17,07
CONV*(1)#	8,297	429,868
		446,91
Software — 0.3%		
Magic Leap Inc., Series C, CONV*(1)#	15,808	426,816
Magic Leap, Inc., Series D, CONV*(1)#	10,934	295,218
		722,034
TOTAL PREFERRED STOCKS		
(Cost \$2,661,836)		3,833,123
	,	
REAL ESTATE INVESTMENT TRUSTS — 0.5%	•	
<b>Diversified — 0.5</b> % Crown Castle International Corp.		
•	13.325	1,447,495
(Cost \$1,346,181)	13,325	1,447,495
•	13,325 <b>Par</b>	1,447,495
•		1,447,495
•	Par	1,447,495
(Cost \$1,346,181)  CORPORATE BONDS — 0.2%  Lodging — 0.2%	Par	1,447,495
CORPORATE BONDS — 0.2% Lodging — 0.2% Caesars Entertainment Corp.	Par	1,447,495
CORPORATE BONDS — 0.2% Lodging — 0.2% Caesars Entertainment Corp. 5.000%, 10/01/24	Par (000)	
CORPORATE BONDS — 0.2% Lodging — 0.2% Caesars Entertainment Corp.	Par	1,447,495
CORPORATE BONDS — 0.2% Lodging — 0.2% Caesars Entertainment Corp. 5.000%, 10/01/24	Par (000)	
CORPORATE BONDS — 0.2% Lodging — 0.2% Caesars Entertainment Corp. 5.000%, 10/01/24	Par (000)	
CORPORATE BONDS — 0.2% Lodging — 0.2% Caesars Entertainment Corp. 5.000%, 10/01/24	Par (000)  \$ 373  Number of	
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund	Par (000)  \$ 373  Number of Shares	463,179
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares	Par (000)  \$ 373  Number of Shares	463,179
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund	Par (000)  \$ 373  Number of Shares	463,179
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares T. Rowe Price Investment, Ltd.  TOTAL SHORT-TERM INVESTMENTS	Par (000)  \$ 373  Number of Shares	1,067,936 1,80°
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares T. Rowe Price Investment, Ltd.	Par (000)  \$ 373  Number of Shares	1,067,936 1,80°
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares T. Rowe Price Investment, Ltd.  TOTAL SHORT-TERM INVESTMENTS (Cost \$1,069,737)  TOTAL INVESTMENTS — 99.3%	Par (000)  \$ 373  Number of Shares	1,067,936 1,807
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares T. Rowe Price Investment, Ltd.  TOTAL SHORT-TERM INVESTMENTS (Cost \$1,069,737)  TOTAL INVESTMENTS — 99.3% (Cost \$231,631,122)	Par (000)  \$ 373  Number of Shares	1,067,936 1,80° 1,069,737 280,558,637
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares T. Rowe Price Investment, Ltd.  TOTAL SHORT-TERM INVESTMENTS (Cost \$1,069,737)  TOTAL INVESTMENTS — 99.3%	Par (000)  \$ 373  Number of Shares	1,067,936 1,80° 1,069,737 280,558,637
CORPORATE BONDS — 0.2%  Lodging — 0.2%  Caesars Entertainment Corp. 5.000%, 10/01/24 (Cost \$629,267)  SHORT-TERM INVESTMENTS — 0.4%  BlackRock Liquidity Funds FedFund Portfolio — Institutional Shares T. Rowe Price Investment, Ltd.  TOTAL SHORT-TERM INVESTMENTS (Cost \$1,069,737)  TOTAL INVESTMENTS — 99.3% (Cost \$231,631,122)	Par (000)  \$ 373  Number of Shares	

<sup>(1)</sup> The value of this security was determined using significant unobservable inputs and is reported as a Level 3 security in the Valuation Hierarchy table located at the end of the Schedule of Investments.

<sup>†</sup> See Security Valuation Note.

<sup>\*</sup> Non-income producing security.

<sup>#</sup> Restricted Security. These investments are in securities not registered under the Securities Act of 1933, as amended, and have certain restrictions on resale which may limit their liquidity. At December 31, 2018, the aggregate value of restricted securities was \$4,926,097, which represented 1.7% of the Fund's net assets. The Fund has various registration rights (exercisable under a variety of circumstances) with respect to these securities.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Growth Stock Fund

Investment	Date of Acquisition	Cost	Value
Airbnb Series D	4/16/2014	\$ 407,090	\$1,061,194
Airbnb Series E	7/14/2015	343,891	392,044
Ant International Co.			
Class C	6/7/2018	1,064,929	1,064,930
Magic Leap Series C	1/20/2016	364,106	426,816
Magic Leap Series D	10/12/2017	295,218	295,218
Uber Technologies			
Class A	1/16/2018	18,957	28,044
Uber Technologies			
Series A	1/16/2018	2,703	4,000
Uber Technologies			
Series B	1/16/2018	7,253	10,730
Uber Technologies			
Series C-1	1/16/2018	1,912	2,829
Uber Technologies			
Series C-2	1/16/2018	1,550	2,292
Uber Technologies			
Series C-3	1/16/2018	33	49
Uber Technologies	4/46/2040	4 744	2.526
Series D	1/16/2018	1,714	2,536
Uber Technologies	4/46/2040	02.4	1 2 10
Series E	1/16/2018	824	1,219
Uber Technologies	4/46/2049	644.047	(44.040
Series G	1/16/2018	611,847	611,848
Uber Technologies Series G-1	1/16/2018	6,145	6,145
Uber Technologies	1/10/2010	0,175	0,145
Series Seed	1/16/2018	6,923	10,242
WeWork Companies	1/10/2010	0,923	10,272
Class A	6/23/2015	10,821	17,045
WeWork Companies	0/25/2015	10,021	17,015
Series E	6/23/2015	272,885	429,868
Xiaoju Kuaizhi	0/25/20.5	2,2,003	123,000
Series A	10/19/2015	326,920	559,048
Total	10/10/2010		
iotai		\$3,745,721	\$4,926,097
ADP American Den	ositon, Posoint		
ADR — American Depo CONV — Convertible S			
PLC — Public Limited (	,		
r LC — r ublic Littliceu C	Lompany.		
Country Weightings as	s of 12/31/2018 #		
			03%
United States			92%
China			4
Italy Netherlands			1 1
Switzerland			1
			1
United Kingdom			
Total			100%

 $\dagger \%$  of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

	ASSETS TABLE							
Description	Total Market Value at 12/31/2018	Market Level 1 Significant Value at Quoted Observable		Level 3 Significant Unobservable Input				
COMMON STOCKS								
Aerospace & Defense	s 12,234,073	\$ 12,234,073	\$ —	\$ —				
Agriculture	2,731,552	2,731,552	· _					
Apparel	3,175,935	3,175,935	_	_				
Auto Manufacturers	5,803,534	5,803,534	_	_				
Auto Parts &	3,3,22 .	2,222,22						
Equipment	2,455,966	2,455,966	_	_				
Banks	3,003,245	3,003,245	_	_				
Biotechnology	6,267,444	6,267,444	_	_				
Chemicals	1,965,497	1,965,497	_	_				
Commercial Services	11,282,025	11,282,025	_					
Computers	2,156,464	2,156,464	_					
Diversified Financial	2,150,101	2,150,101						
Services	27,676,563	26,611,633	_	1,064,930				
Electric	1,254,459	1,254,459	_	.,00 1,550				
Electronics	3,847,514	3,847,514	_					
Gas	2,448,123	2,448,123	_					
Healthcare Products	15,036,588	15,036,588	_					
Healthcare Services	17,940,744	17,940,744						
Home Builders	1,145,385	1,145,385	_					
Insurance	2,208,978	2,208,978	_					
Internet	77,829,217	71,444,429	6,356,744	28,044				
Lodging	5,545,766	5,545,766	-					
Machinery -	5,5 15,7 00	3,5 13,7 00						
Diversified	3,740,709	3,740,709						
Media	3,948,387	3,948,387	_					
Pharmaceuticals	4,584,536	4,584,536						
Retail	7,446,834	7,446,834						
Semiconductors	4,377,318	4,377,318						
Software	43,102,704	43,102,704						
Water	535,543	535,543	_					
	333,3 .3							
TOTAL COMMON STOCKS	272 74E 102	266 20E 20E	6,356,744	1 002 074				
	273,745,103	266,295,385	0,330,744	1,092,974				
PREFERRED STOCKS	3,833,123	_	_	3,833,123				
REAL ESTATE								
INVESTMENT TRUSTS	1,447,495	1,447,495		_				
CORPORATE BONDS	463,179	_	463,179	_				
SHORT-TERM								
INVESTMENTS	1,069,737	1,069,737						
TOTAL INVESTMENTS	\$280,558,637	\$268,812,617	\$6,819,923	\$4,926,097				

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Growth Stock Fund

Following is a reconciliation of Level 3 investments for which significant unobservable inputs were used to determine fair value:

	Investments in Securities (Market Value)
Balance as of 12/31/2017	\$ 4,768,348
Change in Appreciation/(Depreciation)	53,220
Purchases	1,112,946
Sales/Exchange	(1,238,809)
Realized Gain (Loss)	230,392
Balance as of 12/31/2018	\$ 4,926,097

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Cap Growth Fund

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 99.3%					
Aerospace & Defense — 1.7% United Technologies Corp.	8,470	\$ 901,886	Healthcare Products — (continued) Thermo Fisher Scientific, Inc.	5,943	\$ 1,329,984
Apparel — 6.2%					1,643,274
adidas AG	2,655	554,867	Household Products & Wares — 2.2%		
LVMH Moet Hennessy Louis Vuitton S.E.	3,306	967,918	Church & Dwight Co., Inc.	7,104	467,159
NIKE, Inc., Class B VF Corp.	15,722 8,466	1,165,629 603,964	Reckitt Benckiser Group PLC	9,003	689,417
vi corp.	0,400	3,292,378			1,156,576
		3,292,376	Insurance — 2.9%		
Beverages — 1.2%	6.054	669 946	Aon PLC	10,720	1,558,259
PepsiCo, Inc.	6,054	668,846	Internet — 8.2%	ŕ	
Chemicals — 3.6%			Alibaba Group Holding Ltd. ADR*	6,392	876,151
LyondellBasell Industries N.V., Class A	1,788	148,690	Alphabet, Inc., Class A*	3,335	3,484,942
PPG Industries, Inc. The Sherwin-Williams Co.	9,278 2,101	948,490 826,660	•		4,361,093
THE SHELWIN WILLIAMS CO.	2,101		Markinson Disassified 2.0%		
		1,923,840	Machinery — Diversified — 2.0% Nordson Corp.	9,165	1,093,843
Commercial Services — 6.7%	5 400	040.430	·	5,105	1,000,010
Ecolab, Inc.	5,498	810,130	Media — 3.4%	30.760	4 252 020
Equifax, Inc. Experian PLC	2,019 27,389	188,030 663,962	Comcast Corp., Class A The Walt Disney Co.	39,760 2,050	1,353,828 224,783
Moody's Corp.	7,183	1,005,907	Twenty-First Century Fox, Inc., Class A	5,552	267,162
Verisk Analytics, Inc.*	8,639	941,997	Twenty First Centerly Fox, Inc., class 70	2,222	1,845,773
,		3,610,026			1,073,773
C			Miscellaneous Manufacturing — 1.8%	4.430	06.247
Computers — 7.9% Accenture PLC, Class A	13,069	1 947 960	Colfax Corp.*	4,130	86,317
Apple, Inc.	8,520	1,842,860 1,343,945	Danaher Corp.	8,570	883,738
Cognizant Technology Solutions Corp.,	0,520	1,0 10,0 10			970,055
Class A	16,266	1,032,565	Oil & Gas Services — 0.1%		
		4,219,370	Schlumberger Ltd.	1,455	52,496
Cosmetics & Personal Care — 4.5%			Pharmaceuticals — 3.9%		
Colgate-Palmolive Co.	18,702	1,113,143	Abbott Laboratories	15,894	1,149,613
L'Oreal S.A.	1,520	347,813	Cigna Corp.	466	88,503
The Estee Lauder Cos., Inc., Class A	7,178	933,858	Elanco Animal Health, Inc.*	1,168	36,827
		2,394,814	Eli Lilly & Co. Zoetis, Inc.	3,102 5,152	358,963 440,702
Diversified Financial Services — 8.8%			20003,	3,.32	2,074,608
CME Group, Inc.	1,599	300,804			2,074,000
Mastercard, Inc., Class A	5,766	1,087,756	Retail — 5.4%		
The Blackstone Group LP	37,452	1,116,444	AutoZone, Inc.*	356	298,449
The Charles Schwab Corp.	11,158	463,392	CVS Health Corp. Starbucks Corp.	4,165 20,347	272,891 1,310,346
Visa, Inc., Class A	13,185	1,739,629	The TJX Cos., Inc.	23,020	1,029,915
		4,708,025	,	-,-	2,911,601
Electronics — 5.9%					2,511,001
Amphenol Corp., Class A	10,015	811,415	Semiconductors — 6.3%	12 107	1 020 144
Fortive Corp.	9,152	619,224	Analog Devices, Inc. Taiwan Semiconductor Manufacturing Co.	12,107	1,039,144
Mettler-Toledo International, Inc.*	1,515	856,854	Ltd. ADR	19,825	731,741
Waters Corp.*	4,529	854,396	Texas Instruments, Inc.	16,694	1,577,583
		3,141,889			3,348,468
Entertainment — 0.8%			Software — 10.9%		
Paddy Power Betfair PLC	5,225	426,760	Software — 10.9% Electronic Arts, Inc.*	13,554	1,069,546
Healthcare Products — 3.1%			Fidelity National Information Services, Inc.	11,444	1,173,582
The Cooper Cos., Inc.	1,231	313,290	Fiserv, Inc.*	15,172	1,114,990
					•

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Cap Growth Fund

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Software — (continued)		_
Microsoft Corp.	24,440	\$ 2,482,371
		5,840,489
Transportation — 1.8%		
Union Pacific Corp.	6,839	945,355
TOTAL COMMON STOCKS		
(Cost \$43,277,685)		53,089,724
SHORT-TERM INVESTMENTS — 0.6%		
Money Market — 0.6% BlackRock Liquidity Funds FedFund		
Portfolio —Institutional Shares		
(Cost \$322,361)	322,361	322,361
TOTAL INVESTMENTS — 99.9%		
(Cost \$43,600,046)		53,412,085
Other Assets & Liabilities — 0.1%		31,795
TOTAL NET ASSETS — 100.0%		\$ 53,443,880

<sup>†</sup> See Security Valuation Note.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE							
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input			
COMMON STOCKS							
Aerospace & Defense	\$ 901,886	\$ 901,886	\$ —	\$ <del></del>			
Apparel	3,292,378	1,769,593	1,522,785	_			
Beverages	668,846	668,846	_	_			
Chemicals	1,923,840	1,923,840	_	_			
Commercial Services	3,610,026	2,946,064	663,962	_			
Computers	4,219,370	4,219,370	_	_			
Cosmetics & Personal							
Care	2,394,814	2,047,001	347,813	_			
Diversified Financial							
Services	4,708,025	4,708,025	_	_			
Electronics	3,141,889	3,141,889	_	_			
Entertainment	426,760	_	426,760	_			
Healthcare Products	1,643,274	1,643,274	_	_			
Household Products &							
Wares	1,156,576	467,159	689,417	_			
Insurance	1,558,259	1,558,259	_	_			
Internet	4,361,093	4,361,093	_	_			
Machinery -							
Diversified	1,093,843	1,093,843	_	_			
Media	1,845,773	1,845,773	_	_			
Miscellaneous							
Manufacturing	970,055	970,055	_	_			
Oil & Gas Services	52,496	52,496	_	_			
Pharmaceuticals	2,074,608	2,074,608	_	_			
Retail	2,911,601	2,911,601	_	_			
Semiconductors	3,348,468	3,348,468	_	_			
Software	5,840,489	5,840,489	_	_			
Transportation	945,355	945,355	_	_			
TOTAL COMMON							
STOCKS	53,089,724	49,438,987	3,650,737	_			
SHORT-TERM							
INVESTMENTS	322,361	322,361	_	_			
TOTAL INVESTMENTS	\$53,412,085	\$49,761,348	\$3,650,737	\$—			

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

<sup>\*</sup> Non-income producing security.

LP — Limited Partnership.

 $<sup>{\</sup>sf ADR} \, {\longleftarrow} \, {\sf American \ Depository \ Receipt.}$ 

PLC — Public Limited Company.

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Core Growth Fund

	Number of Shares	Value†	
COMMON STOCKS — 98.4%			
Aerospace & Defense — 1.3%			Software — (continue
United Technologies Corp.	15,134	\$ 1,611,468	Intuit, Inc.
Apparel — 3.7%			MSCI, Inc.
LVMH Moet Hennessy Louis Vuitton S.E.	14,854	1 318 808	salesforce.com, Inc.*
EVMIT Moet Hermessy Louis vultion 3.L.	17,007	4,348,898	ServiceNow, Inc.*
Building Materials — 1.4%			Workday, Inc., Class A*
Martin Marietta Materials, Inc.	9,768	1,678,826	
Chemicals — 1.6%			Transpartation 6.7%
Linde PLC	12,054	1,880,906	Transportation — 6.7% Canadian National Rail
	,		Union Pacific Corp.
Commercial Services — 4.4%	42.570	4.053.400	omon racine corp.
Ecolab, Inc.	12,570	1,852,190	
Rollins, Inc.	44,520	1,607,172	TOTAL COMMON STO
S&P Global, Inc.	10,534	1,790,148	(Cost \$105,740,952)
		5,249,510	
Electronics — 1.5%			SHORT-TERM INVESTM
Fortive Corp.	25,955	1,756,115	BlackRock Liquidity Fur
Fundamental Control 4.7%			Portfolio - Institution
Environmental Control — 1.7%	22.447	4.070.963	(Cost \$1,674,607)
Waste Management, Inc.	22,147	1,970,862	
Healthcare Products — 5.0%			TOTAL INVESTMENTS
Intuitive Surgical, Inc.*	12,324	5,902,210	(Cost \$107,415,559)
Healthcare Services — 3.4%			Other Assets & Liabilit
UnitedHealth Group, Inc.	16,292	4,058,663	TOTAL NET ASSETS —
17	-, -		
Internet — 26.6%	4.426	4 3 7 3 6 3 7	
Alphabet, Inc., Class C*	4,126	4,272,927	† See Security Valuati
Amazon.com, Inc.*	6,925	10,401,339	* Non-income produc
Booking Holdings, Inc.*	1,053	1,813,708	PLC — Public Limited C
Facebook, Inc., Class A*	32,071	4,204,188	
IAC/InterActive Corp.*	17,251	3,157,623	Country Weightings as
MercadoLibre, Inc.*	6,609	1,935,446	United States
Twitter, Inc.*	196,746	5,654,480	Canada
		31,439,711	France
Media — 2.5%			Argentina
The Walt Disney Co.	27,365	3,000,572	United Kingdom
Missallaneous Manufacturing 199			
<b>Miscellaneous Manufacturing</b> — <b>1.8</b> % Danaher Corp.	20,222	2 085 203	Total
·	20,222	2,085,293	# % of total investmen
Pharmaceuticals — 5.2%			ii wor total iii estilicii
Elanco Animal Health, Inc.*	98,666	3,110,939	
Zoetis, Inc.	35,461	3,033,334	
		6,144,273	
Retail — 6.5%			
Copart, Inc.*	37,616	1,797,292	
Starbucks Corp.	91,212	5,874,053	
our such sorp.	71,212		
		7,671,345	
Software — 25.1%			
Activision Blizzard, Inc.	38,690	1,801,793	
Adobe, Inc.*	18,761	4,244,489	
Constellation Software, Inc.	2,803	1,794,191	

	Number of Shares	Value†
Software — (continued)		
Intuit, Inc.	9,174	\$ 1,805,902
MSCI, Inc.	12,285	1,811,177
salesforce.com, Inc.*	32,906	4,507,135
ServiceNow, Inc.*	36,017	6,412,827
Workday, Inc., Class A*	46,007	7,346,398
,	,	29,723,912
Transportation — 6.7%		
Canadian National Railway Co.	51,843	3,842,085
Union Pacific Corp.	29,432	4,068,385
•		7,910,470
TOTAL COMMON STOCKS		
(Cost \$105,740,952)		116,433,034
SHORT-TERM INVESTMENTS — 1.4%		
BlackRock Liquidity Funds FedFund		
Portfolio - Institutional Shares		
(Cost \$1,674,607)	1,674,607	1,674,607
TOTAL INVESTMENTS — 99.8%		
(Cost \$107,415,559)		118,107,641
Other Assets & Liabilities — 0.2%		256,869
TOTAL NET ASSETS — 100.0%		\$118,364,510
† See Security Valuation Note.		
* Non-income producing security.		
PLC — Public Limited Company.		
Country Weightings as of 12/31/2018 #		
United States		88%
Canada		5
France		4
Argentina		2
United Kingdom		1

<sup>†† %</sup> of total investments as of December 31, 2018.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Core Growth Fund

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE								
Description	Total Market Value at 12/31/2018	Qı	vel 1 oted rice	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input			
COMMON STOCKS								
Aerospace &								
Defense	\$ 1,611,468	3 \$ 1,	611,468	\$ —	\$			
Apparel	4,348,898	3	_	4,348,898	_			
<b>Building Materials</b>	1,678,826	5 1,	678,826	_	_			
Chemicals	1,880,906	5 1,	880,906	_	_			
Commercial Services	5,249,510	) 5,	249,510	_	_			
Electronics	1,756,115	5 1,	756,115	_	_			
Environmental								
Control	1,970,862	2 1,	970,862	_	_			
Healthcare Products	5,902,210	) 5,	902,210	_	_			
Healthcare Services	4,058,663	3 4,	058,663	_	_			
Internet	31,439,71	I 31,	439,711	_	_			
Media	3,000,572	2 3,	000,572	_	_			
Miscellaneous								
Manufacturing	2,085,293	3 2,	085,293	_	_			
Pharmaceuticals	6,144,273	6,	144,273	_	_			
Retail	7,671,345	7,	671,345	_	_			
Software	29,723,912	29,	723,912	_	_			
Transportation	7,910,470	) 7,	910,470	_				
TOTAL COMMON								
STOCKS	116,433,034	112,	084,136	4,348,898				
SHORT-TERM								
INVESTMENTS	1,674,607	<sup>7</sup> 1,	674,607	_				
TOTAL INVESTMENTS	\$118,107,64	\$113,	758,743	\$4,348,898	\$			

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Cap Value Fund

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — 91.5%							
Aerospace & Defense — 3.7% Raytheon Co.	43,210	ب	6 676 753	Healthcare Services — (continued)	7.740	_	(42.042
•	45,210	\$	6,626,253	Quest Diagnostics, Inc.	7,710	\$	642,012
Agriculture — 1.1%	41 220		2 0/1 280			_	3,420,637
Altria Group, Inc.	41,330	_	2,041,289	Home Builders — 3.4%	178 380		6 170 10E
Airlines — 1.9%	40.030		2 027 447	D.R. Horton, Inc.	178,280	_	6,179,185
Delta Air Lines, Inc. Southwest Airlines Co.	40,830 28,870		2,037,417 1,341,878	Insurance — 9.9%	25 560		4 46 4 54 4
Southwest / Willies Co.	20,070	_		Aflac, Inc. Berkshire Hathaway, Inc., Class B*	25,560 35,810		1,164,514 7,311,686
		_	3,379,295	Fidelity National Financial, Inc.	82 <b>,</b> 914		2,606,816
Auto Manufacturers — 0.6%				Reinsurance Group of America, Inc.	21,880		3,068,232
PACCAR, Inc.	19,210	_	1,097,659	The Allstate Corp.	43,940		3,630,762
Auto Parts & Equipment — 2.4%						1	7,782,010
Altra Industrial Motion Corp.	84,250		2,118,887	Internet — 1.5%			
BorgWarner, Inc.	17,220		598,223	Expedia Group, Inc.	14,260		1,606,389
WABCO Holdings, Inc.*	14,824	_	1,591,208	F5 Networks, Inc.*	6,500		1,053,195
		_	4,308,318				2,659,584
Banks — 8.0%				Media — 6.1%		_	
Citigroup, Inc.	62,826		3,270,722	Comcast Corp., Class A	146,118		4,975,318
JPMorgan Chase & Co.	65,985		6,441,456	Discovery, Inc., Class A*	47,900		1,185,046
Northern Trust Corp.	15,860		1,325,737	The Walt Disney Co.	43,990		4,823,503
The Goldman Sachs Group, Inc.	19,310	_	3,225,735				0,983,867
			14,263,650	Missellaneous Manufastruins 19%		_	-,,,-,,,
Biotechnology — 3.4%				Miscellaneous Manufacturing — 1.8% Crane Co.	30,240		2,182,723
Biogen, Inc.*	10,190		3,066,375	Parker-Hannifin Corp.	7,070		1,054,420
Celgene Corp.*	22,220		1,424,080	ranker riaminin corp.	7,070		3,237,143
Gilead Sciences, Inc.	25,460		1,592,523	_		_	ر ۱۳ , ۱۷ کرک
			6,082,978	Oil & Gas — 9.0%	25.200		020 725
Commercial Services 0.9%				Apache Corp.	35,380 46.530		928,725
Commercial Services — 0.8% Euronet Worldwide, Inc.*	13,950		1,428,201	ConocoPhillips Exxon Mobil Corp.	46,520 34,300		2,900,522 2,338,917
	15,550	_	1,720,201	Murphy USA, Inc.*	18,990		1,455,394
Computers — 2.0%				Noble Energy, Inc.	126,510		2,373,328
Apple, Inc.	5,551		875,615	Phillips 66	70,770		6,096,835
Cognizant Technology Solutions Corp., Class A	25.240		1 602 225			1	6,093,721
HP, Inc.	25,240 57,560		1,602,235 1,177,678	Oil & Gas Services — 0.8%			
in, inc.	57,500	_		Dril-Quip, Inc.*	27,340		821,020
		_	3,655,528	National Oilwell Varco, Inc.	22,940		589,558
Diversified Financial Services — 1.6%							1,410,578
Capital One Financial Corp.	38,030	_	2,874,688	Diagram acusticala 0.4%		_	, ,
Electrical Components & Equipment — 0.9%				Pharmaceuticals — 9.4% Cigna Corp.	26,650		5,061,368
Acuity Brands, Inc.	14,240		1,636,888	Eli Lilly & Co.	26,249		3,037,535
Electronics — 3.1%				Pfizer, Inc.	89,057		3,887,338
Coherent, Inc.*	8,180		864,708	Roche Holding AG ADR	156,240		4,855,939
FLIR Systems, Inc.	36,930		1,607,932			1	6,842,180
Garmin Ltd.	21,450		1,358,214	Real Estate — 1.9%			, ,
Keysight Technologies, Inc.*	26,830		1,665,606	CBRE Group, Inc., Class A*	87,132		3,488,765
			5,496,460	• • •	07,132	_	J, 100,70J
Engineering & Construction 0.09		_	<u> </u>	Retail — 4.7%	40.070		1 102 046
Engineering & Construction — 0.8% EMCOR Group, Inc.	23,490		1,402,118	CVS Health Corp. Walgreens Boots Alliance, Inc.	18,070 17,260		1,183,946 1,179,376
• •	4 <i>5</i> ,۳۶۵	-	1,702,110	Walmart, Inc.	64,360		5,995,134
Healthcare Services — 1.9%	40 =00		2 770 127	·	0 1,500		8,358,456
Anthem, Inc.	10,580		2,778,625			_	U,JJU,TJU

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Cap Value Fund

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Semiconductors — 1.0%		
QUALCOMM, Inc.	13,040	\$ 742,106
Skyworks Solutions, Inc.	16,040	1,075,001
		1,817,107
Software — 0.9%		
Akamai Technologies, Inc.*	25,090	1,532,497
Telecommunications — 6.4%		
Cisco Systems, Inc.	81,810	3,544,827
Verizon Communications, Inc.	141,847	7,974,639
		11,519,466
Transportation — 2.5%		
Kansas City Southern	11,260	1,074,767
Knight-Swift Transportation		
Holdings, Inc.	40,000	1,002,800
Norfolk Southern Corp.	9,595	1,434,836
Saia, Inc.*	18,975	1,059,185
		4,571,588
TOTAL COMMON STOCKS		
(Cost \$175,536,084)		164,190,109
REAL ESTATE INVESTMENT TRUSTS — 2.0%		
Strip Centers — 2.0%		
Regency Centers Corp.		
(Cost \$3,997,342)	62,200	3,649,896
SHORT-TERM INVESTMENTS — 6.2%		
BlackRock Liquidity Funds FedFund		
Portfolio — Institutional Shares		
(Cost \$11,052,202)	11,052,202	11,052,202
TOTAL INVESTMENTS — 99.7%		
(Cost \$190,585,628)		178,892,207
Other Assets & Liabilities — 0.3%		548,384
TOTAL NET ASSETS — 100.0%		\$179,440,591

<sup>†</sup> See Security Valuation Note.

ADR — American Depository Receipt.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE

Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON STOCKS REAL ESTATE INVESTMENT	\$164,190,109	\$164,190,109	\$——	\$
TRUSTS SHORT-TERM	3,649,896	3,649,896	_	_
INVESTMENTS	11,052,202	11,052,202	_	_
TOTAL INVESTMENTS	\$178,892,207	\$178,892,207	\$—	\$—

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

<sup>\*</sup> Non-income producing security.

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Core Value Fund

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 95.7%					
Banks — 12.6%			Healthcare Products — 2.5%		
Bank of America Corp.	,	\$ 5,925,476	Baxter International, Inc.	45,810	\$ 3,015,214
Credit Suisse Group AG ADR* JPMorgan Chase & Co.	100,038 31,946	1,086,413 3,118,569	Boston Scientific Corp.*	38,378	1,356,279
KeyCorp	113,976	1,684,565			4,371,493
Northern Trust Corp.	28,239	2,360,498	Healthcare Services — 2.3%		
The PNC Financial Services Group, Inc.	41,491	4,850,713	Anthem, Inc.	12,207	3,205,924
U.S. Bancorp	68,322	3,122,315	WellCare Health Plans, Inc.*	3,875	914,849
		22,148,549			4,120,773
Beverages — 2.1%			Home Builders — 0.8%		
Constellation Brands, Inc., Class A	10,149	1,632,162	D.R. Horton, Inc.	40,809	1,414,440
PepsiCo, Inc.	19,289	2,131,049	Insurance — 3.8%		
		3,763,211	American Financial Group, Inc.	9,910	897,152
Biotechnology — 1.2%			American International Group, Inc.	47,900	1,887,739
Gilead Sciences, Inc.	34,844	2,179,492	Berkshire Hathaway, Inc., Class B*	7,925	1,618,127
	5 1,0 11		The Progressive Corp.	36,561	2,205,725
Chemicals — 2.2%	74 000	2 020 074			6,608,743
DowDuPont, Inc.	71,802	3,839,971	Lodging — 0.8%		
Commercial Services — 0.5%			Marriott International, Inc., Class A	12,168	1,320,958
S&P Global, Inc.	5,246	891,505	Machinery - Diversified — 1.5%		
Computers — 2.2%			Gardner Denver Holdings, Inc.*	131,397	2,687,069
Apple, Inc.	8,342	1,315,867	Media — 2.5%	,	
Leidos Holdings, Inc.	47,130	2,484,694	The Walt Disney Co.	23,331	2,558,244
		3,800,561	Twenty-First Century Fox, Inc., Class A	39,141	1,883,465
Cosmetics & Personal Care — 2.9%			, , ,	,	4,441,709
The Procter & Gamble Co.	56,419	5,186,034	Missellaneous Manufasturing 4.2%		
Diversified Financial Services — 4.2%			Miscellaneous Manufacturing — 4.2% Hexcel Corp.	40,238	2,307,247
Ally Financial, Inc.	43,157	977,938	Parker-Hannifin Corp.	18,702	2,789,216
American Express Co.	24,225	2,309,127	Textron, Inc.	50,568	2,325,623
Discover Financial Services	35,624	2,101,103			7,422,086
Raymond James Financial, Inc.	26,770	1,991,956			7,122,000
		7,380,124	Oil & Gas — 8.4% ConocoPhillips	61.050	3,807,029
Electric — 5.7%			EOG Resources, Inc.	61,059 34,368	2,997,233
CMS Energy Corp.	51,844	2,574,055	Exxon Mobil Corp.	74,615	5,087,997
Edison International	56,811	3,225,160	Phillips 66	33,905	2,920,916
NextEra Energy, Inc.	24,229	4,211,485			14,813,175
		10,010,700	Oil 9 Cos Somisos 1 F%		
Floatronics 16%			Oil & Gas Services — 1.5% Halliburton Co.	84,753	2,252,735
Electronics — 1.6% FLIR Systems, Inc.	63,237	2,753,339	Oceaneering International, Inc.*	28,855	349,145
,	05,257	2,7 55,555	, in the same of t	,,,,,	2,601,880
Engineering & Construction — 1.5%	02.002	2 (72 242			2,001,000
Fluor Corp.	82,992	2,672,342	Packaging and Containers — 2.3%	E2 70E	2 460 356
Food — 2.0%			Ball Corp. Packaging Corp. of America	53,705 19,416	2,469,356 1,620,459
Mondelez International, Inc., Class A	87,978	3,521,759	rackaging corp. or America	15,110	
Gas — 1.3%					4,089,815
Sempra Energy	21,699	2,347,615	Pharmaceuticals — 10.5%		4.050.411
Hand & Machine Tools — 1.1%			Abbott Laboratories GlaxoSmithKline PLC ADR	25,275 77 141	1,828,141
Stanley Black & Decker, Inc.	15,531	1,859,682	Johnson & Johnson	77,141 55,417	2,947,558 7,151,564
•	•		Merck & Co., Inc.	86,196	6,586,236
			<b>,</b> -	,-,-	18,513,499
					10,717,477

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Large Core Value Fund

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Retail — 4.6%		
Tapestry, Inc.	46,718	\$ 1,576,732
The Home Depot, Inc.	9,473	1,627,651
The TJX Cos., Inc.	38,188	1,708,531
Tiffany & Co.	20,831	1,677,104
Tractor Supply Co.	18,657	1,556,740
		8,146,758
Savings & Loans — 0.7%		
Sterling Bancorp	70,160	1,158,342
Semiconductors — 4.3%		
NXP Semiconductors N.V.	34,648	2,539,005
QUALCOMM, Inc.	87,371	4,972,284
		7,511,289
Telecommunications — 3.9%		
Verizon Communications, Inc.	122,001	6,858,896
TOTAL COMMON STOCKS		
(Cost \$177,344,616)		168,435,809
REAL ESTATE INVESTMENT TRUSTS — 3.9%		
Apartments — 2.7%		
AvalonBay Communities, Inc.	17,770	3,092,868
Invitation Homes, Inc.	85,969	1,726,258
		4,819,126
Office Property — 1.2%		
Boston Properties, Inc.	18,847	2,121,230
TOTAL REAL ESTATE INVESTMENT TRUSTS		
(Cost \$7,220,768)		6,940,356
TOTAL INVESTMENTS — 99.6%		
(Cost \$184,565,384)		175,376,165
Other Assets & Liabilities — 0.4%		695,819
TOTAL NET ASSETS — 100.0%		\$176,071,984

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

ADR — American Depository Receipt.

PLC — Public Limited Company.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE Total Level 2 Level 3 Market Level 1 Significant Significant Value at Quoted Observable Unobservable Description 12/31/2018 Price Input Input **COMMON STOCKS** \$168,435,809 \$168,435,809 REAL ESTATE INVESTMENT TRUSTS 6,940,356 6,940,356 TOTAL INVESTMENTS \$175,376,165 \$175,376,165

<sup>†</sup> See Security Valuation Note.

<sup>\*</sup> Non-income producing security.

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 95.6%		· · · · · · · · · · · · · · · · · · ·			· · · ·
Advertising — 0.1%			Banks — (continued)		
Omnicom Group, Inc.	4,551	\$ 333,315	Citizens Financial Group, Inc.	8,863	\$ 263,497
The Interpublic Group of Cos., Inc.	7,882	162,606	Comerica, Inc.	3,037	208,612
		495,921	Fifth Third Bancorp	13,243	311,608
Acrosposo 9 Defense 3.4%			First Republic Bank	3,200	278,080
Aerospace & Defense — 2.4%	7.040	124.020	Huntington Bancshares, Inc.	20,019	238,626
Arconic, Inc. General Dynamics Corp.	7,949 5,377	134,020	JPMorgan Chase & Co.	64,896	6,335,147
Harris Corp.	2,337	845,318 314,677	KeyCorp	19,650	290,427
L3 Technologies, Inc.	1,600	277,856	M&T Bank Corp.	2,685	384,304
Lockheed Martin Corp.	4,859	1,272,281	Morgan Stanley	25,336	1,004,572
Northrop Grumman Corp.	3,360	822,864	Northern Trust Corp.	4,246	354,923
Raytheon Co.	5,579		Regions Financial Corp.	19,761	264,402
The Boeing Co.	10,295	855,540 3,320,137	State Street Corp.	7,394	466,340
TransDigm Group, Inc.*	931	316,596	SunTrust Banks, Inc.	8,615	434,541
United Technologies Corp.	15,914		SVB Financial Group*	1,100	208,912
officed rectifiologies corp.	17,717	1,694,523	The Bank of New York Mellon Corp.	17,597	828,291
		9,853,812	The Goldman Sachs Group, Inc.	6,711	1,121,073
Agriculture — 1.0%			The PNC Financial Services Group, Inc.	8,945	1,045,760
Altria Group, Inc.	36,554	1,805,402	U.S. Bancorp	29,508	1,348,516
Archer-Daniels-Midland Co.	10,735	439,813	Wells Fargo & Co.	82,605	3,806,438
Philip Morris International, Inc.	30,198	2,016,019	Zions Bancorp NA	3,904	159,049
		4,261,234			26,859,720
Airlines — 0.4%			Beverages — 1.9%		
Alaska Air Group, Inc.	2,542	154,681	Brown-Forman Corp., Class B	3,179	151,257
American Airlines Group, Inc.	7,921	254,343	Constellation Brands, Inc., Class A	3,265	525,077
Delta Air Lines, Inc.	12,007	599,149	Molson Coors Brewing Co., Class B	3,554	199,592
Southwest Airlines Co.	9,721	451,832	Monster Beverage Corp.*	7,926	390,118
United Continental Holdings, Inc.*	4,556	381,474	PepsiCo, Inc.	27,508	3,039,084
g-,	,,	1,841,479	The Coca-Cola Co.	74,685	3,536,335
Apparel — 0.7%		.,01.,175			7,841,463
Capri Holdings Ltd.*	3,128	118,614	Biotechnology — 2.1%		
Hanesbrands, Inc.	7,600	95,228	Alexion Pharmaceuticals, Inc.*	4,268	415,533
NIKE, Inc., Class B	24,759	1,835,632	Amgen, Inc.	12,407	2,415,271
PVH Corp.	1,500	139,425	Biogen, Inc.*	3,948	1,188,032
Ralph Lauren Corp.	1,060	109,668	Celgene Corp.*	13,538	867,650
Under Armour, Inc., Class A*	3,900	68,913	Gilead Sciences, Inc.	25,099	1,569,942
Under Armour, Inc., Class C*	3,927	63,500	Illumina, Inc.*	2,846	853,601
VF Corp.	6,301	449,513	Incyte Corp.*	3,321	211,182
1	-,2		Regeneron Pharmaceuticals, Inc.*	1,537	574,070
		2,880,493	Vertex Pharmaceuticals, Inc.*	4,993	827,390
Auto Manufacturers — 0.5%	77 400	E00 E40			8,922,671
Ford Motor Co.	77,192	590,519	Building Materials — 0.3%		
General Motors Co.	25,780	862,341	Fortune Brands Home & Security, Inc.	2,768	105,156
PACCAR, Inc.	7,018	401,008	Johnson Controls International PLC	18,451	547,072
		1,853,868	Martin Marietta Materials, Inc.	1,292	222,056
Auto Parts & Equipment — 0.1%			Masco Corp.	6,134	179,358
Aptiv PLC	5,181	318,994	Vulcan Materials Co.	2,641	260,931
BorgWarner, Inc.	3,768	130,900	vareari materials co.	2,011	
The Goodyear Tire & Rubber Co.	5,070	103,479			1,314,573
		553,373	Chemicals — 1.9%		
Panks 6.5%			Air Products & Chemicals, Inc.	4,272	683,734
Banks — 6.5%	170 044	4 306 404	Albemarle Corp.	2,152	165,855
Bank of America Corp.	178,011	4,386,191	Celanese Corp.	2,600	233,922
BB&T Corp. Citigroup, Inc.	14,869 47,566	644,125 2,476,286	CF Industries Holdings, Inc.	4,309	187,485
ciagioup, inc.	77,700	۷,٦/٥,۷٥٥	DowDuPont, Inc.	44,671	2,389,005

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Chemicals — (continued)			Distribution & Wholesale — 0.2%		
Eastman Chemical Co.	2,620	\$ 191,548	Fastenal Co.	5,800	\$ 303,282
FMC Corp.	2,800	207,088	Genuine Parts Co.	2,777	266,647
International Flavors & Fragrances, Inc.	1,980	265,855	LKQ Corp.*	6,400	151,872
Linde PLC	10,736	1,675,245	W.W. Grainger, Inc.	902	254,689
LyondellBasell Industries N.V., Class A	6,195	515,176			976,490
PPG Industries, Inc.	4,774	488,046			
The Mosaic Co.	6,834	199,621	Diversified Financial Services — 4.0%		
The Sherwin-Williams Co.	1,599	629,142	Affiliated Managers Group, Inc.	1,047	102,020
		7,831,722	American Express Co.	13,605	1,296,829
Commercial Services — 2.1%			Ameriprise Financial, Inc.	2,646	276,163
Allegion PLC	1,966	156,710	BlackRock, Inc.	2,351	923,520
Alliance Data Systems Corp.	1,000	150,080	Capital One Financial Corp. Cboe Global Markets, Inc.	9,146 2,300	691,346 225,009
Automatic Data Processing, Inc.	8,581	1,125,141	CME Group, Inc.	6,987	1,314,394
Cintas Corp.	1,668	280,207	Discover Financial Services	6,425	378,946
Ecolab, Inc.	4,911	723,636	E*TRADE Financial Corp.	4,776	209,571
Equifax, Inc.	2,264	210,846	Franklin Resources, Inc.	5,827	172,829
FleetCor Technologies, Inc.*	1,795	333,367	Intercontinental Exchange, Inc.	11,000	828,630
Gartner, Inc.*	1,800	230,112	Invesco Ltd.	8,067	135,042
Global Payments, Inc.	3,078	317,434	Jefferies Financial Group, Inc.	5,017	87,095
H&R Block, Inc.	4,166	105,691	Mastercard, Inc., Class A	17,712	3,341,369
IHS Markit Ltd.*	7,000	335,790	Nasdag, Inc.	2,199	179,372
Moody's Corp.	3,338	467,454	Raymond James Financial, Inc.	2,553	189,969
Paychex, Inc.	6,376	415,396	Synchrony Financial	12,566	294,798
PayPal Holdings, Inc.*	22,928	1,928,016	T. Rowe Price Group, Inc.	4,705	434,366
Quanta Services, Inc.	2,677	80,578	The Charles Schwab Corp.	23,279	966,777
Robert Half International, Inc.	2,394	136,937	Visa, Inc., Class A	34,275	4,522,243
Rollins, Inc.	3,000	108,300			16,570,288
S&P Global, Inc.	4,845	823,359			10,570,200
The Western Union Co.	8,445	144,072	Electric — 3.0%		
Total System Services, Inc.	3,177	258,258	AES Corp.	12,844	185,724
United Rentals, Inc.*	1,505	154,308	Alliant Energy Corp.	4,717	199,293
Verisk Analytics, Inc.*	3,094	337,370	Ameren Corp.	4,650	303,320
		8,823,062	American Electric Power Co., Inc.	9,620	718,999
C 1 10%			CMS Energy Corp. Consolidated Edison, Inc.	5,427	269,451
Computers — 4.9%	42.404	4 740 665	Dominion Resources, Inc.	5,982	457,384
Accenture PLC, Class A	12,401	1,748,665	,	12,790 3,514	913,973 387,594
Apple, Inc.	87,874	13,861,245	DTE Energy Co. Duke Energy Corp.	14,041	1,211,738
Class A	11 150	776 946	Edison International	6,437	365,428
Class A DXC Technology Co.	11,450 5,669	726,846 301,421	Entergy Corp.	3,568	307,098
Fortinet, Inc.*	2,900	204,247	Evergy, Inc.	5,005	284,134
Hewlett Packard Enterprise Co.	2,900	358,374	Eversource Energy	6,055	393,817
HP, Inc.	30,531	624,664	Exelon Corp.	19,073	860,192
International Business Machines Corp.	17,687	2,010,481	FirstEnergy Corp.	9,256	347,563
NetApp, Inc.	4,787	285,640	NextEra Energy, Inc.	9,259	1,609,399
Seagate Technology PLC	5,158	199,047	NRG Energy, Inc.	5,461	216,256
Western Digital Corp.	5,783	213,798	PG&E Corp.*	10,450	248,188
	-,, -,		Pinnacle West Capital Corp.	2,115	180,198
		20,534,428	PPL Corp.	13,998	396,563
Cosmetics & Personal Care — 1.5%			Public Service Enterprise Group, Inc.	9,817	510,975
Colgate-Palmolive Co.	16,992	1,011,364	SCANA Corp.	2,645	126,378
Coty, Inc., Class A	9,763	64,045	The Southern Co.	20,041	880,201
The Estee Lauder Cos., Inc., Class A	4,226	549,803	WEC Energy Group, Inc.	6,350	439,801
The Procter & Gamble Co.	48,594	4,466,760	Xcel Energy, Inc.	10,163	500,731
		6,091,972			12,314,398

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)		<u> </u>			'
Electrical Components & Equipment — 0.3%			Hand & Machine Tools — (continued)		
AMETEK, Inc.	4,700	\$ 318,190	Stanley Black & Decker, Inc.	3,048	\$ 364,967
Emerson Electric Co.	12,075	721,481			523,769
		1,039,671	Healthcare Products — 2.9%		
Electronics — 1.2%			ABIOMED, Inc.*	843	274,009
Agilent Technologies, Inc.	6,344	427,966	Align Technology, Inc.*	1,381	289,223
Amphenol Corp., Class A	5,786	468,782	Baxter International, Inc.	9,542	628,054
FLIR Systems, Inc.	2,637	114,815	Becton Dickinson & Co.	5,195	1,170,537
Fortive Corp.	5,620	380,249	Boston Scientific Corp.*	27,353	966,655
Garmin Ltd.	2,400	151,968	DENTSPLY SIRONA, Inc.	4,121	153,342
Honeywell International, Inc.	14,404	1,903,056	Edwards Lifesciences Corp.*	4,031	617,428
Keysight Technologies, Inc.*	3,700	229,696	Henry Schein, Inc.*	3,100	243,412
Mettler-Toledo International, Inc.*	474	268,085	Hologic, Inc.*	5,358	220,214
PerkinElmer, Inc.	2,270	178,309	IDEXX Laboratories, Inc.*	1,641	305,259
TE Connectivity Ltd.	6,758	511,108	Intuitive Surgical, Inc.*	2,227	1,066,555
Waters Corp.*	1,542	290,898	Medtronic PLC	26,153	2,378,877
	.,5 12		ResMed, Inc.	2,900	330,223
		4,924,932	Stryker Corp.	6,074	952,100
Engineering & Construction — 0.1%			The Cooper Cos., Inc.	1,000	254,500
Fluor Corp.	2,770	89,194	Thermo Fisher Scientific, Inc.	7,912	1,770,626
Jacobs Engineering Group, Inc.	2,268	132,587	Varian Medical Systems, Inc.*	1,751	198,406
		221,781	Zimmer Biomet Holdings, Inc.	3,907	405,234
					12,224,654
Environmental Control — 0.2%	4.226	204 (52	Healthcare Services — 2.2%		
Republic Services, Inc.	4,226	304,652	Anthem, Inc.	5,022	1,318,928
Waste Management, Inc.	7,558	672,587	Centene Corp.*	3,933	453,475
		977,239	DaVita, Inc.*	2,416	124,327
Food — 1.3%			HCA Healthcare, Inc.	5,179	644,526
Campbell Soup Co.	4,016	132,488	Humana, Inc.	2,647	758,313
Conagra Brands, Inc.	9,483	202,557	IQVIA Holdings, Inc.*	3,000	348,510
General Mills, Inc.	11,892	463,074	Laboratory Corp. of America Holdings*	1,903	240,463
Hormel Foods Corp.	5,600	239,008	Quest Diagnostics, Inc.	2,787	232,073
·	4,799	273,591	UnitedHealth Group, Inc.	18,766	4,674,986
Kellogg Co. Lamb Weston Holdings, Inc.	2,900	273,391	Universal Health Services, Inc., Class B	1,596	186,030
McCormick & Co., Inc.	2,419	336,822	WellCare Health Plans, Inc.*	1,000	236,090
		1,126,885	Wellcare Health Flans, IIIc.	1,000	
Mondelez International, Inc., Class A	28,151 9,305	583,051			9,217,721
Sysco Corp. The Hershey Co.	2,755	295,281	Home Builders — 0.1%		
The J.M. Smucker Co.	2,733	293,281	D.R. Horton, Inc.	6,876	238,322
The Kraft Heinz Co.	12,139		Lennar Corp., Class A	5,536	216,735
The Krager Co.	15,301	522,463 420,777	PulteGroup, Inc.	5,063	131,587
Tyson Foods, Inc., Class A	5,856	312,710	. a.tee. oap, mei	5,005	
ryson roods, mc., class A	5,650				586,644
		5,330,607	Home Furnishings — 0.0%		
Forest Products & Paper — 0.1%			Whirlpool Corp.	1,260	134,656
International Paper Co.	7,960	321,266	Household Products & Wares — 0.4%		
Gas — 0.2%			Avery Dennison Corp.	1,601	143,818
CenterPoint Energy, Inc.	9,796	276,541	Church & Dwight Co., Inc.	4,777	314,136
NiSource, Inc.	6,493	164,597	Kimberly-Clark Corp.	6,693	762,600
Sempra Energy	5,262	569,296	The Clorox Co.	2,441	376,256
F	2,202	1,010,434		,	1,596,810
Hand 9 Mashina Table 94%		.,,,,,,,	Housewares — 0.0%		
Hand & Machine Tools — 0.1%	1 002	150 000	Newell Brands, Inc.	8,513	158,257
Snap-on, Inc.	1,093	158,802	- · -·· - · -· -· - · · · · · · · · · ·	-,, .,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Insurance — 4.2%			Lodging — (continued)		
Aflac, Inc.	14,958	\$ 681,486	Wynn Resorts Ltd.	1,730	\$ 171,114
American International Group, Inc.	17,064	672,492			1,409,406
Aon PLC	4,641	674,616	Marking Construction 9 Mining 0.49		
Arthur J. Gallagher & Co.	3,731	274,975	Machinery - Construction & Mining — 0.4% Caterpillar, Inc.	11,464	1 456 720
Assurant, Inc.	1,160	103,750	Caterpinar, inc.	11,404	1,456,730
Berkshire Hathaway, Inc., Class B*	37,972	7,753,123	Machinery - Diversified — 0.6%		
Brighthouse Financial, Inc.*	2,135	65,075	Cummins, Inc.	2,900	387,556
Chubb Ltd.	8,938	1,154,611	Deere & Co.	6,218	927,539
Cincinnati Financial Corp.	2,992	231,641	Flowserve Corp.	2,800	106,456
Everest Re Group Ltd.	800	174,208	Rockwell Automation, Inc.	2,375	357,390
Lincoln National Corp.	4,173	214,117	Roper Technologies, Inc.	2,008	535,172
Loews Corp.	5,425	246,946	Xylem, Inc.	3,538	236,056
Marsh & McLennan Cos., Inc.	9,721	775,250			2,550,169
MetLife, Inc.	19,073	783,137	Media — 2.3%		
Principal Financial Group, Inc. Prudential Financial, Inc.	5,300 7,968	234,101 649,790	CBS Corp., Class B	6,399	279,764
The Allstate Corp.	6,724	555,604	Charter Communications, Inc., Class A*	3,417	973,743
The Hartford Financial Services Group, Inc.	6,953	309,061	Comcast Corp., Class A	88,482	3,012,812
The Progressive Corp.	11,509	694,338	Discovery, Inc., Class A*	3,500	86,590
The Travelers Cos., Inc.	5,097	610,366	Discovery, Inc., Class C*	6,876	158,698
Torchmark Corp.	2,044	152,339	DISH Network Corp., Class A*	4,352	108,669
Unum Group	4,667	137,116	News Corp., Class B	2,500	28,875
Willis Towers Watson PLC	2,559	388,610	News Corp., Class A	7,615	86,430
Thins Towers Transon Lee	2,555		Nielsen Holdings PLC	6,921	161,467
		17,536,752	The Walt Disney Co.	29,013	3,181,276
Internet — 8.7%			Twenty-First Century Fox, Inc., Class A	20,483	985,642
Alphabet, Inc., Class A*	5,834	6,096,297	Twenty-First Century Fox, Inc., Class B	9,100	434,798
Alphabet, Inc., Class C*	6,004	6,217,802	Viacom, Inc., Class B	7,381	189,692
Amazon.com, Inc.*	8,005	12,023,270			9,688,456
Booking Holdings, Inc.*	901	1,551,900			
eBay, Inc.*	17,392	488,193	Mining — 0.2%		
Expedia Group, Inc.	2,403	270,698	Freeport-McMoRan, Inc.	27,196	280,391
F5 Networks, Inc.*	1,163	188,441	Newmont Mining Corp.	10,697	370,651
Facebook, Inc., Class A*	46,888	6,146,548			651,042
Netflix, Inc.*	8,474	2,268,151	Miscellaneous Manufacturing — 1.8%		
Symantec Corp.	12,738	240,685	3M Co.	11,335	2,159,771
TripAdvisor, Inc.*	1,994	107,556	A.O. Smith Corp.	2,818	120,329
Twitter, Inc.*	14,124	405,924	Danaher Corp.	11,970	1,234,346
VeriSign, Inc.*	2,091	310,074	Dover Corp.	2,919	207,103
		36,315,539	Eaton Corp. PLC	8,348	573,174
Iron & Steel — 0.1%			General Electric Co.	170,300	1,289,171
Nucor Corp.	6,375	330,289	Illinois Tool Works, Inc.	5,899	747,344
·	5,5.5		Ingersoll-Rand PLC	4,712	429,876
Leisure Time — 0.2%			Leggett & Platt, Inc.	2,854	102,287
Carnival Corp.	7,676	378,427	Parker-Hannifin Corp.	2,645	394,475
Harley-Davidson, Inc.	3,471	118,431	Pentair PLC	3,319	125,392
Norwegian Cruise Line Holdings Ltd.*	3,800	161,082	Textron, Inc.	4,577	210,496
Royal Caribbean Cruises Ltd.	3,270	319,773			7,593,764
		977,713			
Lodging — 0.3%			Office & Business Equipment — 0.0%	4.530	00.67
Hilton Worldwide Holdings, Inc.	5,800	416,440	Xerox Corp.	4,538	89,671
Marriott International, Inc., Class A	5,456	592,304	Oil & Gas — 4.4%		
MGM Resorts International	9,462	229,548	Anadarko Petroleum Corp.	9,677	424,240

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Oil & Gas — (continued)			Pipelines — 0.4%		
Apache Corp.	7,635	\$ 200,419	Kinder Morgan, Inc.	37,602	\$ 578,319
Cabot Oil & Gas Corp.	8,823	197,194	ONEOK, Inc.	7,989	431,007
Chevron Corp.	37,262	4,053,733	The Williams Cos., Inc.	24,149	532,485
Cimarex Energy Co.	1,861	114,731			1,541,811
Concho Resources, Inc.*	3,890	399,853	_		
ConocoPhillips	22,361	1,394,208	Real Estate — 0.1%		
Devon Energy Corp.	8,905	200,719	CBRE Group, Inc., Class A*	5,896	236,076
Diamondback Energy, Inc.	3,000	278,100	Retail — 5.9%		
EOG Resources, Inc.	11,243	980,502	Advance Auto Parts, Inc.	1,441	226,900
Exxon Mobil Corp.	82,616	5,633,585	AutoZone, Inc.*	483	404,918
Helmerich & Payne, Inc.	2,300	110,262	Best Buy Co., Inc.	4,414	233,765
Hess Corp.	4,866	197,073	CarMax, Inc.*	3,567	223,758
HollyFrontier Corp.	3,193	163,226	Chipotle Mexican Grill, Inc.*	500	215,895
Marathon Oil Corp.	17,044	244,411	Copart, Inc.*	4,200	200,676
Marathon Petroleum Corp.	13,087	772,264	Costco Wholesale Corp.	8,613	1,754,554
Newfield Exploration Co.*	4,100	60,106	CVS Health Corp.	25,379	1,662,832
Noble Energy, Inc.	9,538	178,933	Darden Restaurants, Inc.	2,428	242,460
Occidental Petroleum Corp.	14,591	895,595	Dollar General Corp.	5,073	548,290
Phillips 66	8,191	705,655 429,807	Dollar Tree, Inc.*	4,729	427,123
Pioneer Natural Resources Co.	3,268	,	Foot Locker, Inc.	2,248	119,594
Valero Energy Corp.	8,174	612,805	Kohl's Corp.	3,093	205,190
		18,247,421	L Brands, Inc.	4,435	113,846
Oil & Gas Services — 0.5%			Lowe's Cos., Inc.	15,599	1,440,724
Baker Hughes a GE Co.	10,034	215,731	Macy's, Inc.	6,263	186,512
Halliburton Co.	17,441	463,582	McDonald's Corp.	15,018	2,666,746
National Oilwell Varco, Inc.	7,802	200,511	Nordstrom, Inc.	2,331	108,648
Schlumberger Ltd.	26,787	966,475	O'Reilly Automotive, Inc.*	1,541	530,613
TechnipFMC PLC	8,262	161,770	Ross Stores, Inc.	7,190	598,208
	-,		Starbucks Corp.	24,351	1,568,204
		2,008,069	Tapestry, Inc.	5,884	198,585
Packaging and Containers — 0.2%			Target Corp.	10,069	665,460
Ball Corp.	6,700	308,066	The Gap, Inc.	4,382	112,880
Packaging Corp. of America	2,000	166,920	The Home Depot, Inc.	22,023	3,783,992
Sealed Air Corp.	3,231	112,568	The TJX Cos., Inc.	23,993	1,073,447
WestRock Co.	5,037	190,197	Tiffany & Co.	2,105	169,474
		777,751	Tractor Supply Co.	2,334	194,749
			Ulta Beauty, Inc.*	1,119	273,976
Pharmaceuticals — 6.9%			Walgreens Boots Alliance, Inc.	15,598	1,065,811
Abbott Laboratories	34,141	2,469,419	Walmart, Inc.	27,726	2,582,677
AbbVie, Inc.	29,293	2,700,522	Yum! Brands, Inc.	6,169	567,055
Allergan PLC	6,239	833,905	,	-,	
AmerisourceBergen Corp.	3,104	230,938			24,367,562
Bristol-Myers Squibb Co.	31,732	1,649,429	Savings & Loans — 0.0%		
Cardinal Health, Inc.	6,026	268,760	People's United Financial, Inc.	6,500	93,795
Cigna Corp.	7,394	1,404,268	Coming ductors 2.7%		
Eli Lilly & Co.	18,344	2,122,768	Semiconductors — 3.7%	17.000	242 920
Johnson & Johnson	52,344	6,754,993	Advanced Micro Devices, Inc.*	17,000	313,820
McKesson Corp.	3,741	413,268	Analog Devices, Inc.	7,236	621,066
Merck & Co., Inc.	50,701	3,874,063	Applied Materials, Inc.	18,957	620,652
Mylan N.V.*	10,456	286,494	Broadcom, Inc.	8,046	2,045,937
Nektar Therapeutics*	3,300	108,471	Intel Corp.	89,009	4,177,192
Perrigo Co. PLC	2,383	92,341	IPG Photonics Corp.*	800	90,632
Pfizer, Inc.	112,757	4,921,843	KLA-Tencor Corp.	2,984	267,038
Zoetis, Inc.	9,411	805,017	Lam Research Corp.	2,967	404,016
		28,936,499	Maxim Integrated Products, Inc.	5,500	279,675

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Semiconductors — (continued)			Transportation — (continued)		
Microchip Technology, Inc.	4,518	\$ 324,935	CSX Corp.	15,545	\$ 965,811
Micron Technology, Inc.*	21,643	686,732	Expeditors International of Washington,		
NVIDIA Corp.	11,940	1,593,990	Inc.	3,482	237,089
Qorvo, Inc.*	2,470	150,003	FedEx Corp.	4,754	766,963
QUALCOMM, Inc.	23,772	1,352,865	J.B. Hunt Transport Services, Inc.	1,800	167,472
Skyworks Solutions, Inc.	3,551	237,988	Kansas City Southern	2,001	190,995
Texas Instruments, Inc.	18,681	1,765,355	Norfolk Southern Corp.	5,266	787,478
Xilinx, Inc.	5,043	429,512	Union Pacific Corp.	14,338	1,981,942
		15,361,408	United Parcel Service, Inc., Class B	13,596	1,326,018
Shipbuilding — 0.0%					6,641,477
Huntington Ingalls Industries, Inc.	900	171,279	Water — 0.1%		
			American Water Works Co., Inc.	3,534	320,781
Software — 6.9%	44.724	606.463		2,221	
Activision Blizzard, Inc.	14,734	686,162	TOTAL COMMON STOCKS		
Adobe, Inc.*	9,502	2,149,732	(Cost \$206,987,722)		398,461,698
Akamai Technologies, Inc.*	3,053	186,477			
ANSYS, Inc.*	1,669	238,567	REAL ESTATE INVESTMENT TRUSTS — 2.8	%	
Autodesk, Inc.*	4,310	554,309	Apartments — 0.4%		
Broadridge Financial Solutions, Inc.	2,400	231,000	Apartment Investment & Management		
Cadence Design Systems, Inc.*	5,481	238,314	Co., Class A	3,162	138,749
Cerner Corp.*	6,300	330,372	AvalonBay Communities, Inc.	2,750	478,638
Citrix Systems, Inc.	2,591	265,474	Equity Residential	7,144	471,575
Electronic Arts, Inc.*	6,012	474,407	Essex Property Trust, Inc.	1,302	319,263
Fidelity National Information Services, Inc.	6,496	666,165	Mid-America Apartment Communities,	,-	,
Fiserv, Inc.*	7,878	578,954	Inc.	2,300	220,110
Intuit, Inc.	5,062	996,455	UDR, Inc.	5,545	219,693
Jack Henry & Associates, Inc.	1,500	189,780	,	,	1,848,028
Microsoft Corp.	150,663	15,302,841			1,040,020
MSCI, Inc.	1,765	260,214	Building & Real Estate — 0.1%		
Oracle Corp.	49,830	2,249,824	Realty Income Corp.	5,700	359,328
Red Hat, Inc.*	3,523	618,780	Commercial Services — 0.0%		
salesforce.com, Inc.*	14,870	2,036,744	Iron Mountain, Inc.	5,197	168,435
Synopsys, Inc.* Take-Two Interactive Software, Inc.*	3,000	252,720	non mountain, me.	2,127	
rake-two interactive software, inc.	2,300	236,762	Diversified — 0.9%	0.556	4 252 474
		28,744,053	American Tower Corp.	8,556	1,353,474
Telecommunications — 3.3%			Crown Castle International Corp.	8,111	881,098
Arista Networks, Inc.*	1,000	210,700	Digital Realty Trust, Inc.	3,992	425,347
AT&T, Inc.	141,936	4,050,853	Duke Realty Corp.	6,867	177,855
CenturyLink, Inc.	18,914	286,547	SBA Communications Corp.*	2,164	350,330
Cisco Systems, Inc.	87,665	3,798,525	Vornado Realty Trust	3,570	221,447
Corning, Inc.	15,368	464,267	Weyerhaeuser Co.	15,073	329,496
Juniper Networks, Inc.	6,771	182,208			3,739,047
Motorola Solutions, Inc.	3,278	377,101	Healthcare — 0.3%		
Verizon Communications, Inc.	80,592	4,530,882	HCP, Inc.	9,163	255,923
		13,901,083	Ventas, Inc.	7,153	419,094
Textiles — 0.0%			Welltower, Inc.	7,444	516,688
Mohawk Industries, Inc.*	1,308	152,984			1,191,705
Toys, Games & Hobbies — 0.1%			Hotels & Resorts — 0.1%		_
Hasbro, Inc.	2,412	195,975	Host Hotels & Resorts, Inc.	14,025	233,797
Mattel, Inc.*	7,481	74,735		.,>	
,	.,	270,710	Industrial — 0.2%	12 425	720 504
			Prologis, Inc.	12,425	729,596
<b>Transportation</b> — <b>1.6</b> % C.H. Robinson Worldwide, Inc.	2,589	217,709			

Managhan af

	Number of Shares	Value†
REAL ESTATE INVESTMENT TRUSTS —	(continued)	
Office Property — 0.2%		
Alexandria Real Estate Equities, Inc.	2,000	\$ 230,480
Boston Properties, Inc.	3,063	344,741
SL Green Realty Corp.	1,800	142,344
		717,565
Regional Malls — 0.2%		
Simon Property Group, Inc.	5,984	1,005,252
The Macerich Co.	2,223	96,211
	,	1,101,463
5		1,101,109
Storage & Warehousing — 0.2%	2.506	224.006
Extra Space Storage, Inc.	2,596	234,886
Public Storage	2,915	590,025
		824,911
Strip Centers — 0.1%		
Federal Realty Investment Trust	1,416	167,145
Kimco Realty Corp.	8,160	119,544
Regency Centers Corp.	3,253	190,886
		477,575
Telecommunications — 0.1%		
Equinix, Inc.	1,583	558,102
TOTAL REAL ESTATE INVESTMENT TRU	ISTS	
(Cost \$8,900,107)		11,949,552
	Par	
	(000)	
U.S. TREASURY OBLIGATION — 0.1%	, ,	
U.S. Treasury Bill¤, <sup>(a)</sup>		
2.445%, 06/20/19		
(Cost \$247,084)	\$ 250	247,134
	Number of	
	Shares	
SHORT-TERM INVESTMENTS — 0.7%		
BlackRock Liquidity Funds FedFund		
Portfolio - Institutional Shares		
(Cost \$2,971,016)	2,971,016	2,971,016
, , , ,	_,,,,,,,,,	
TOTAL INVESTMENTS — 99.2%		443 630 400
(Cost \$219,105,929)		413,629,400
Other Assets & Liabilities — 0.8%		3,234,942
TOTAL NET ASSETS — 100.0%		\$ 416,864,342
		·

- † See Security Valuation Note.
- Non-income producing security.
- Zero Coupon Bond. The interest rate disclosed represents the effective yield from the date of acquisition to maturity.
- (a) All or portion of securities segregated as collateral for futures contracts.

NA — National Association. PLC — Public Limited Company.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE								
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input				
COMMON STOCKS REAL ESTATE INVESTMENT	\$398,461,698	\$398,461,698	\$ —	\$——				
TRUSTS U.S. TREASURY	11,949,552	11,949,552	_	_				
OBLIGATION SHORT-TERM	247,134	_	247,134	_				
INVESTMENTS	2,971,016	2,971,016	_	_				
TOTAL INVESTMENTS	\$413,629,400	\$413,382,266	\$247,134	\$—				

	LIABILITIES TABLE							
Description	Total Market Value at 12/31/2018		Level 1 Quoted Price	Level 2 Significant Observable Input		Level 3 Significant Unobservable Input		
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup> Futures Contracts	\$	(214,395) \$	(214,395)	\$	_	\$—		
TOTAL LIABILITIES - OTHER FINANCIAL INSTRUMENTS	\$	(214,395)\$	(214,395)	\$	_	\$—		

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as future contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

#### **Futures Contracts:**

Туре	Futures Contract	Expiration Date	Numbers of Contracts	Units per Contract	Closing Price	Notional Value	Unrealized Appreciation	Unrealized Depreciation
Buy/Long	E-Mini S&P 500 Index	3/29/2019	36	50	\$2,505	\$4,509,360	<u>\$ —</u>	<u>\$(214,395</u> )
Total							<u> </u>	<u>\$(214,395)</u>

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Mid Cap Growth Fund

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — 97.7%							
Aerospace & Defense — 2.0%				Healthcare Products — (continued)			
Harris Corp.	12,237	\$	1,647,712	Intuitive Surgical, Inc.*	4,777	\$	2,287,801
Spirit AeroSystems Holdings, Inc., Class A	7,770	_	560,139				8,209,346
			2,207,851	Healthcare Services — 1.2%			
Apparel — 1.4%				Laboratory Corp. of America Holdings*	10,213		1,290,515
Burberry Group PLC	72,608		1,594,400	Household Products & Wares — 0.9%	,	_	
Auto Parts & Equipment — 1.4%				The Scotts Miracle-Gro Co.	16,641		1,022,756
BorgWarner, Inc.	45,481		1,580,010		. 0,0 1 .	_	.,022,750
	,,,,,	_	72 7	Internet — 6.8%  GrubHub, Inc.*	26,008		1,997,674
Banks — 2.6% First Republic Bank	23,126		2,009,649	MercadoLibre, Inc.*	7 <b>,</b> 313		2,141,612
SVB Financial Group*	4,924		935,166	Palo Alto Networks, Inc.*	7,579		1,427,505
372 Financial droup	1,52 1	_		Proofpoint, Inc.*	9,684		811,616
		_	2,944,815	Twilio, Inc., Class A*	11,515		1,028,290
Biotechnology — 0.7%				Twitter, Inc.*	9,741	_	279,956
Seattle Genetics, Inc.*	14,589	_	826,613			_	7,686,653
Building Materials — 1.1%				Machinery — Diversified — 4.4%			
Trex Co., Inc.*	20,666		1,226,734	IDEX Corp.	15,069		1,902,612
Chemicals — 2.6%				The Middleby Corp.*	16,492		1,694,223
Axalta Coating Systems Ltd.*	69,319		1,623,451	Wabtec Corp.	18,454	_	1,296,394
RPM International, Inc.	21,230		1,247,899			_	4,893,229
			2,871,350	Miscellaneous Manufacturing — 1.5%			
6		_	, , , , , , , , , , , , , , , , , ,	A.O. Smith Corp.	38,316		1,636,093
Commercial Services — 8.1% CoStar Group, Inc.*	9,892		3,336,967	Pharmaceuticals — 6.2%			
MarketAxess Holdings, Inc.	9,892 8,819		1,863,543	BioMarin Pharmaceutical, Inc.*	18,832		1,603,545
Square, Inc., Class A*	35,337		1,982,053	DexCom, Inc.*	16,202		1,940,999
TransUnion	34,634		1,967,211	Zoetis, Inc.	39,433	_	3,373,099
	,		9,149,774				6,917,643
		_	2)	Retail — 16.6%			
Distribution & Wholesale — 2.0% Fastenal Co.	42.200		2 244 244	Chipotle Mexican Grill, Inc.*	7,973		3,442,662
rasterial Co.	42,290	_	2,211,344	Duluth Holdings, Inc., Class B*	22,313		562,957
Diversified Financial Services — 2.4%				Dunkin' Brands Group, Inc.	33,305		2,135,516
CME Group, Inc.	9,281		1,745,942	Lululemon Athletica, Inc.*	16,585		2,016,902
Oaktree Capital Group LLC	25,274	_	1,004,641	National Vision Holdings, Inc.* O'Reilly Automotive, Inc.*	30,863 6,590		869,411 2,269,135
		_	2,750,583	Tiffany & Co.	22,513		1,812,521
Electrical Components & Equipment — 0.6	%			Tractor Supply Co.	37,676		3,143,685
Universal Display Corp.	7,769		726,945	Ulta Beauty, Inc.*	10,101		2,473,129
Electronics — 4.9%							18,725,918
Agilent Technologies, Inc.	20,695		1,396,085	Semiconductors — 5.9%			
Coherent, Inc.*	5,859		619,355	Maxim Integrated Products, Inc.	36,517		1,856,890
Fortive Corp.	25,751		1,742,313	Microchip Technology, Inc.	26,303		1,891,712
Keysight Technologies, Inc.*	28,570		1,773,625	Monolithic Power Systems, Inc.	14,692		1,707,945
			5,531,378	Teradyne, Inc.	35,959	_	1,128,393
Food — 3.0%						_	6,584,940
Sprouts Farmers Market, Inc.*	86,000		2,021,860	Software — 10.8%			
The Hershey Co.	12,715		1,362,794	Autodesk, Inc.*	11,798		1,517,341
			3,384,654	Cerner Corp.*	19,688		1,032,439
Harlibara Bardada = 7.2%		_	- /,00 1	DocuSign, Inc.*	6,858		274,869
Healthcare Products — 7.3%	C 040		7 775 074	Electronic Arts, Inc.* Guidewire Software, Inc.*	32,842 27,913		2,591,562 2,239,460
ABIOMED, Inc.* Edwards Lifesciences Corp.*	6,848 16,282		2,225,874 2,493,914	Jack Henry & Associates, Inc.	4,382		554,411
Glaukos Corp.*	21,395		1,201,757	ServiceNow, Inc.*	14,250		2,537,212
	,,,,,		.,== .,, ,,	•	•		

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Mid Cap Growth Fund

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Software — (continued)		
Tyler Technologies, Inc.*	6,499	\$ 1,207,644
Veeva Systems, Inc., Class A*	1,922	171,673
		12,126,611
Telecommunications — 1.5%		
Arista Networks, Inc.*	8,143	1,715,730
Transportation — 1.8%		
Expeditors International of Washington, Inc.	30,495	2,076,404
TOTAL COMMON STOCKS		
(Cost \$90,815,508)		109,892,289
SHORT-TERM INVESTMENTS — 1.2%		
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares		
(Cost \$1,343,031)	1,343,031	1,343,031
•	.,5 ,5,05 .	
TOTAL INVESTMENTS — 98.9% (Cost \$92,158,539)		111,235,320
Other Assets & Liabilities — 1.1%		1,266,654
TOTAL NET ASSETS — 100.0%		\$112,501,974
† See Security Valuation Note.		
* Non-income producing security.		
LLC — Limited Liability Company.		
PLC — Public Limited Company.		
Country Weightings as of 12/31/2018 ††		
United States		95%
Argentina		2
Canada		2
United Kingdom		1

††% of total investments as of December 31, 2018.

Total

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

	`	•	,	
	ASSETS	TABLE		
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON STOCKS				
Aerospace & Defense	\$ 2,207,851	\$ 2,207,851	s —	\$—
Apparel	1,594,400		1,594,400	·
Auto Parts & Equipment	1,580,010	1,580,010		_
Banks	2,944,815	2,944,815	_	_
Biotechnology	826,613	826,613	_	_
Building Materials	1,226,734	1,226,734	_	_
Chemicals	2,871,350	2,871,350	_	_
Commercial Services Distribution &	9,149,774	9,149,774	_	_
Wholesale Diversified Financial	2,211,344	2,211,344	_	_
Services	2,750,583	2,750,583	_	_
Electrical Components &				
Equipment	726,945	726,945	_	_
Electronics	5,531,378	5,531,378	_	_
Food	3,384,654	3,384,654	_	_
Healthcare Products	8,209,346	8,209,346	_	_
Healthcare Services Household Products &	1,290,515	1,290,515	_	_
Wares	1,022,756	1,022,756	_	_
Internet	7,686,653	7,686,653	_	_
Machinery - Diversified Miscellaneous	4,893,229	4,893,229	_	_
Manufacturing	1,636,093	1,636,093	_	_
Pharmaceuticals	6,917,643	6,917,643	_	_
Retail	18,725,918	18,725,918	_	_
Semiconductors	6,584,940	6,584,940	_	_
Software	12,126,611	12,126,611	_	_
Telecommunications	1,715,730	1,715,730	_	_
Transportation	2,076,404	2,076,404	_	_
TOTAL COMMON STOCKS	109,892,289	108,297,889	1,594,400	
SHORT-TERM INVESTMENTS	1,343,031	1,343,031		
TOTAL INVESTMENTS	\$111,235,320		£1 50/ /00	<u> </u>
IOTUT HAVEST MENTS	2111,400,000	7 107,0 <del>1</del> 0,720	71,774,400	ş—

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

100%

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 92.6%					
Aerospace & Defense — 9.4%			Food — 4.7%		
AerCap Holdings N.V.*	119,000	\$ 4,712,400	The Hain Celestial Group, Inc.*	135,300	\$ 2,145,858
Esterline Technologies Corp.*	17,400	2,113,230	TreeHouse Foods, Inc.*	89,000	4,513,190
General Dynamics Corp.	29,350	4,614,114			6,659,048
Spirit AeroSystems Holdings, Inc., Class A	25,700	1,852,713	Gas — 1.4%		
		13,292,457	Vectren Corp.	27,500	1,979,450
Airlines — 2.1%			Healthcare Products — 2.5%		
American Airlines Group, Inc.	44,900	1,441,739	Zimmer Biomet Holdings, Inc.	34,000	3,526,480
JetBlue Airways Corp.*	93,900	1,508,034	<b>3</b> ·	J 1,000	
		2,949,773	Healthcare Services — 0.5%	6.500	755 420
Auto Parts & Equipment — 0.9%			Molina Healthcare, Inc.*	6,500	755,430
Aptiv PLC	21,000	1,292,970	Home Furnishings — 1.7%		
Banks — 9.6%	•		Whirlpool Corp.	22,700	2,425,949
BankUnited, Inc.	97,000	2,904,180	Lodging — 4.3%		
BB&T Corp.	52,200	2,261,304	MGM Resorts International	81,900	1,986,894
Comerica, Inc.	53,400	3,668,046	Wyndham Destinations, Inc.	98,300	3,523,072
KeyCorp	180,000	2,660,400	Wyndham Hotels & Resorts, Inc.	13,200	598,884
State Street Corp.	32,700	2,062,389			6,108,850
		13,556,319	Media — 1.1%		
Payaragas 3.4%			MSG Networks, Inc., Class A*	63,300	1,491,348
Beverages — 2.1%  Molson Coors Brewing Co., Class B	54,100	3,038,256			
Ç ,	J <del>1</del> , 100		Miscellaneous Manufacturing — 3.0%	20.800	1 709 722
Biotechnology — 1.8%			Hexcel Corp. Valmont Industries, Inc.	29,800 22,600	1,708,732 2,507,470
Alexion Pharmaceuticals, Inc.*	26,300	2,560,568	vaimone maastnes, me.	22,000	
Building Materials — 2.5%					4,216,202
Johnson Controls International PLC	119,829	3,552,930	Oil & Gas — 3.8%		
Chemicals — 3.3%			Cabot Oil & Gas Corp.	148,400	3,316,740
Ashland Global Holdings, Inc.	33,900	2,405,544	Devon Energy Corp.	90,700	2,044,378
The Chemours Co.	79,200	2,235,024			5,361,118
		4,640,568	Pharmaceuticals — 2.9%		
Computous AF%			Perrigo Co. PLC	64,700	2,507,125
Computers — 4.5% Conduent, Inc.*	168,600	1,792,218	Teva Pharmaceutical Industries Ltd.		
Teradata Corp.*	68,000	2,608,480	ADR*	107,400	1,656,108
Western Digital Corp.	53,923	1,993,533			4,163,233
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6,394,231	Pipelines — 3.4%		
			ONEOK, Inc.	50,000	2,697,500
Electric — 2.8%			The Williams Cos., Inc.	97,700	2,154,285
AES Corp.	92,400	1,336,104			4,851,785
Edison International	46,100	2,617,097			
		3,953,201	Retail — 4.5%	26.600	4 400 736
Electronics — 1.6%			Best Buy Co., Inc. Chico's FAS, Inc.	26,600 363,100	1,408,736 2,040,622
Itron, Inc.*	46,800	2,213,172	Party City Holdco., Inc.*	298,500	2,979,030
Entertainment — 3.7%			. s. c, s.c,oideoi, iiid	2,500	
International Game Technology PLC	189,500	2,772,385			6,428,388
Lions Gate Entertainment Corp., Class A	39,100	629,510	Semiconductors — 2.9%		
Lions Gate Entertainment Corp., Class B	127,900	1,903,152	Entegris, Inc.	28,400	792,218
		5,305,047	ON Semiconductor Corp.*	109,300	1,804,543
Environmental Control 3.4%			Skyworks Solutions, Inc.	22,800	1,528,056
Environmental Control — 2.4%  Covanta Holding Corp.	254,500	3,415,390			4,124,817
cordina moraling corp.	271,700	<u></u>			

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Software — 3.0%		
Check Point Software Technologies Ltd.*	13,700	\$ 1,406,305
Nuance Communications, Inc.*	213,788	2,828,415
		4,234,720
Telecommunications — 6.2%		
Amdocs Ltd.	27,200	1,593,376
ARRIS International PLC*	101,300	3,096,741
Ciena Corp.*	120,900	4,099,719
		8,789,836
TOTAL COMMON STOCKS		
(Cost \$136,503,767)		131,281,536
REAL ESTATE INVESTMENT TRUSTS — 3.7	%	
Building & Real Estate — 2.8%		
Starwood Property Trust, Inc.	201,900	3,979,449
Diversified — 0.9%		
CoreCivic, Inc.	70,200	1,251,666
TOTAL REAL ESTATE INVESTMENT TRUSTS		
(Cost \$5,349,128)		5,231,115
SHORT-TERM INVESTMENTS — 2.2%		
BlackRock Liquidity Funds FedFund		
Portfolio - Institutional Shares		
(Cost \$3,091,490)	3,091,490	3,091,490
TOTAL INVESTMENTS — 98.5%		
(Cost \$144,944,385)		139,604,141
Other Assets & Liabilities — 1.5%		2,167,263
TOTAL NET ASSETS — 100.0%		\$141,771,404

<sup>†</sup> See Security Valuation Note.

ADR — American Depository Receipt.

PLC — Public Limited Company.

Country Weightings as of 12/31/2018 ††

<u> </u>	
United States	89%
Ireland	4
Netherlands	4
Israel	2
United Kingdom	1
Total	100%

††% of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE									
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input					
COMMON STOCKS REAL ESTATE INVESTMENT	\$131,281,536	\$131,281,536	\$—	\$—					
TRUSTS SHORT-TERM INVESTMENTS	5,231,115 3,091,490	5,231,115 3,091,490	_	_					
TOTAL INVESTMENTS		\$139,604,141	\$—-	\$—					

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

<sup>\*</sup> Non-income producing security.

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 90.3%					
Airlines — 1.3%			Electronics — 1.8%		
Southwest Airlines Co.	21,864	\$ 1,016,239	nVent Electric PLC	25,828	\$ 580,097
Auto Manufacturers — 1.5%			TE Connectivity Ltd.	10,931	826,711
Honda Motor Co. Ltd. ADR	26,483	700,475			1,406,808
PACCAR, Inc.	8,657	494,661	Environmental Control — 0.6%		
		1,195,136	Republic Services, Inc.	7,149	515,371
Auto Davis 9 Equipment 119			•	, -	
Auto Parts & Equipment — 1.1% Aptiv PLC	2,656	163,530	Food — 5.8% Conagra Brands, Inc.	38,135	814,564
BorgWarner, Inc.	19,509	677,743	Kellogg Co.	8,171	465,829
borg warner, me.	19,505		Mondelez International, Inc., Class A	24,482	980,014
		841,273	Orkla ASA	146,605	1,147,903
Banks — 13.9%			Sysco Corp.	12,563	787,198
Bank of Hawaii Corp.	3,117	209,836	The J.M. Smucker Co.	4,326	404,438
BB&T Corp.	39,830	1,725,436			4,599,946
Comerica, Inc.	3,659	251,337			1,222,210
Commerce Bancshares, Inc.	15,181	855,753	Food Service — 0.9%		
First Hawaiian, Inc.	39,912	898,419	Sodexo S.A.	7,106	728,760
M&T Bank Corp.	7,508	1,074,620	Gas — 1.5%		
Northern Trust Corp.	25,695	2,147,845	Atmos Energy Corp.	6,197	574,586
Prosperity Bancshares, Inc. State Street Corp.	6,837 9,959	425,945 628,114	Spire, Inc.	8,232	609,826
SunTrust Banks, Inc.	16,909	852,890			1,184,412
UMB Financial Corp.	17,838	1,087,583			
Westamerica Bancorporation	16,156	899,566	Healthcare Products — 4.5%		
Westamenea Bancorporation	10,150		Hologic, Inc.*	12,806	526,327
		11,057,344	Siemens Healthineers AG*144A @	9,386	392,210
Beverages — 0.5%			Zimmer Biomet Holdings, Inc.	25,748	2,670,582
Molson Coors Brewing Co., Class B	7,181	403,285			3,589,119
Building Materials — 1.6%			Healthcare Services — 1.2%		
Johnson Controls International PLC	41,782	1,238,836	Quest Diagnostics, Inc.	11,191	931,875
Computors 0.7%			Home Builders — 1.8%		
Computers — 0.7% HP, Inc.	27,027	552,972	PulteGroup, Inc.	35,821	930,988
	27,027		Thor Industries, Inc.	9,553	496,756
Distribution & Wholesale — 0.8%			,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,427,744
Genuine Parts Co.	6,975	669,740			1,727,777
Diversified Financial Services — 2.9%			Household Products & Wares — 1.1%		
Ameriprise Financial, Inc.	10,381	1,083,465	Kimberly-Clark Corp.	7,559	861,273
Invesco Ltd.	75,195	1,258,764	Insurance — 5.3%		
		2,342,229	Aflac, Inc.	11,209	510,682
<b>-1 - - - - - - - - - -</b>			Arthur J. Gallagher & Co.	4,494	331,208
Electric — 7.2%	43.454	050.036	Brown & Brown, Inc.	16,587	457,138
Ameren Corp.	13,154	858,036	Chubb Ltd.	9,258	1,195,948
Edison International Eversource Energy	9,719 7,858	551,748 511,084	ProAssurance Corp.	10,013	406,127
NorthWestern Corp.	21,021	1,249,488	Reinsurance Group of America, Inc.	5,551	778,417
Pinnacle West Capital Corp.	11,766	1,002,463	The Travelers Cos., Inc.	1,975	236,506
Xcel Energy, Inc.	30,700	1,512,589	Torchmark Corp.	3,613	269,277
	2 - )	5,685,408			4,185,303
		3,003,400	Leisure Time — 0.7%		
Electrical Components & Equipment — 4.2%			Carnival Corp.	10,849	534,856
Emerson Electric Co.	11,627	694,713	·	, -	
Hubbell, Inc.	19,746	1,961,568	Machinery - Construction & Mining — 0.8%	20.425	639 400
Schneider Electric S.E.	9,602	651,316	Atlas Copco AB, B Shares	29,135	638,400
		3,307,597			

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Machinery - Diversified — 1.3%			Transportation — 1.1%		
Cummins, Inc.	7,500	\$ 1,002,300	Heartland Express, Inc.	46,098	\$ 843,593
Miscellaneous Manufacturing — 2.7%			TOTAL COMMON STOCKS		
Eaton Corp. PLC	11,323	777,437	(Cost \$79,473,444)		71,585,254
IMI PLC	70,771	852,269			
Ingersoll-Rand PLC	2,276	207,639	REAL ESTATE INVESTMENT TRUSTS — 4.4%		
Textron, Inc.	6,650	305,834	Diversified — 2.2%		
		2,143,179	American Tower Corp.	1,994	315,431
Oil & Gas — 4.6%			Weyerhaeuser Co.	64,150	1,402,319
Anadarko Petroleum Corp.	13,014	570,534			1,717,750
Cimarex Energy Co.	10,444	643,873	Hotels & Resorts — 1.0%		
Devon Energy Corp.	31,908	719,206	MGM Growth Properties LLC, Class A	29,588	781,419
EQT Corp.	31,030	586,157	•	27,500	701,117
Imperial Oil Ltd.	13,680	346,609	Office Property — 1.2%		
Noble Energy, Inc.	41,601	780,435	Empire State Realty Trust, Inc., Class A	22,654	322,367
		3,646,814	Piedmont Office Realty Trust, Inc., Class A	38,134	649,803
Oil & Gas Services — 2.4%					972,170
Baker Hughes a GE Co.	40,374	868,041	TOTAL REAL ESTATE INVESTMENT TRUSTS		
Halliburton Co.	21,520	572,002	(Cost \$4,009,427)		3,471,339
National Oilwell Varco, Inc.	17,600	452,320			
		1,892,363	EXCHANGE TRADED FUNDS — 1.8%		
Deal and a read Containing A 200			Investment Companies — 1.8%		
Packaging and Containers — 4.2%	101 759	1 092 705	iShares Russell Mid-Cap Value ETF		
Graphic Packaging Holding Co. Sonoco Products Co.	101,758 21,068	1,082,705 1,119,343	(Cost \$1,625,158)	18,610	1,420,873
WestRock Co.	29,670	1,120,339	(2001 ; 1,020)	.0,0.0	
Westhock Co.	23,070		SHORT-TERM INVESTMENTS — 2.8%		
		3,322,387	BlackRock Liquidity Funds FedFund Portfolio	-	
Pharmaceuticals — 2.5%			Institutional Shares		
Cardinal Health, Inc.	25,813	1,151,260	(Cost \$2,252,792)	2,252,792	2,252,792
McKesson Corp.	7,929	875,916	TOTAL INVESTMENTS — 99.3%		
		2,027,176	(Cost \$87,360,821)		78,730,258
Pipelines — 0.6%					
Equitrans Midstream Corp.*	24,824	496,977	Other Assets & Liabilities — 0.7%		561,872
	,		TOTAL NET ASSETS — 100.0%		\$79,292,130
Retail — 3.1% Advance Auto Parts, Inc.	5,157	812,021			
MSC Industrial Direct Co., Inc., Class A	14,244	1,095,648	<del></del>		
Target Corp.	7,952	525,548	144A @ Security exempt from registration u		
.a.8ec eo.p.	,,,,,		Securities Act of 1933, as amended.		
		2,433,217	aggregate value of Rule 144A securi		,210, wnich
Savings & Loans — 1.0%			represents 0.5% of the Fund's net ass † See Security Valuation Note.	sets.	
Capitol Federal Financial, Inc.	64,095	818,493	* Non-income producing security.		
Semiconductors — 4.3%			ADR — American Depository Receipt.		
Applied Materials, Inc.	14,950	489,463	ETF — Exchange-Traded Fund.		
Lam Research Corp.	4,655	633,871	LLC — Limited Liability Company.		
Maxim Integrated Products, Inc.	21,424	1,089,410	PLC — Public Limited Company.		
Microchip Technology, Inc.	11,248	808,956	• •		
Teradyne, Inc.	12,825	402,449			
		3,424,149			
Software — 0.8%		-			
Software — 0.8% Cerner Corp.*	11,836	620,680			
cerner corp.	11,000	020,000			

Country Weightings as of 12/31/2
----------------------------------

88%
2
2
2
2
1
1
2
100%

 $<sup>\</sup>dagger\dagger$  % of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE

Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON STOCKS				_
Airlines	\$ 1,016,239	\$ 1,016,239	\$ —	\$—
Auto Manufacturers	1,195,136	1,195,136	_	_
Auto Parts &				
Equipment	841,273	841,273	_	_
Banks	11,057,344	11,057,344	_	_
Beverages	403,285	403,285	_	_
Building Materials	1,238,836	1,238,836	_	_
Computers	552,972	552,972	_	_
Distribution &				
Wholesale	669,740	669,740	_	_
Diversified Financial				
Services	2,342,229	2,342,229	_	_
Electric	5,685,408	5,685,408	_	_
<b>Electrical Components</b>				
& Equipment	3,307,597	2,656,281	651,316	_
Electronics	1,406,808	1,406,808	_	_
<b>Environmental Control</b>	515,371	515,371	_	_
Food	4,599,946	3,452,043	1,147,903	_
Food Service	728,760	_	728,760	_
Gas	1,184,412	1,184,412	_	_
Healthcare Products	3,589,119	3,196,909	392,210	_
Healthcare Services	931,875	931,875	_	_
Home Builders	1,427,744	1,427,744	_	_
Household Products &				
Wares	861,273	861,273	_	_
Insurance	4,185,303	4,185,303	_	_
Leisure Time	534,856	534,856	_	_
Machinery -				
Construction &				
Mining	638,400	_	638,400	_
Machinery - Diversified	1,002,300	1,002,300	_	_
Miscellaneous				
Manufacturing	2,143,179	1,290,910	852,269	_
Oil & Gas	3,646,814	3,646,814	_	_
Oil & Gas Services	1,892,363	1,892,363	_	_
Packaging and				
Containers	3,322,387	3,322,387	_	_

ASSETS TABLE	ASS	ETS	TAB	LE
--------------	-----	-----	-----	----

		ASSET	5	IABLE			
Description	١	Total Market /alue at :/31/2018		Level 1 Quoted Price	Si	Level 2 gnificant oservable Input	Level 3 Significant Unobservable Input
Pharmaceuticals	ġ.	2,027,176	Ś	2,027,176	\$	_	\$—
Pipelines	,	496,977	7	496,977	т	_	_
Retail		2,433,217		2,433,217		_	
Savings & Loans		818,493		818,493		_	_
Semiconductors	3	3,424,149		3,424,149		_	_
Software		620,680		620,680			_
Transportation		843,593		843,593		_	_
TOTAL COMMON STOCKS	7	1,585,254	(	67,174,396	2	,410,858	_
REAL ESTATE INVESTMENT TRUSTS EXCHANGE TRADED		3,471,339		3,471,339		_	_
FUNDS SHORT-TERM		1,420,873		1,420,873		_	_
INVESTMENTS	7	2,252,792		2,252,792		_	_
TOTAL INVESTMENTS	\$78	8,730,258	\$	74,319,400	\$4	,410,858	\$—
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup> Forward Foreign Currency Contracts	\$	5,871	\$	_	\$	5,871	\$—
TOTAL ASSETS -OTHER FINANCIAL							
INSTRUMENTS	\$	5,871	\$		\$	5,871	\$— <u> </u>
		LIABILIT	IE:	S TABLE			
Description	٧	Total Market /alue at /31/2018		Level 1 Quoted Price	Si	Level 2 gnificant oservable Input	Level 3 Significant Unobservable Input
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup> Forward Foreign Currency Contracts	\$	(44,388)	) \$	_	\$	(44,388)	\$—

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as forward foreign currency contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

— \$ (44,388)

\$ (44,388)\$

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

TOTAL LIABILITIES -OTHER FINANCIAL INSTRUMENTS

Open forward foreign currency contracts held by Mid Core Value Fund at December 31, 2018 were as follows:

	Currency	Counterparty	Settlement Date	Foreign Currency Contract	Forward Rate	U.S. Contract Amount	U.S. Contract Value	Unrealized Appreciation	Unrealized Depreciation
Sell	Canadian Dollar	Morgan Stanley	03/29/2019	(422,096)	1.36243	\$ (314,901)	\$ (309,810)	\$5,091	\$ —
Buy	Canadian Dollar	Morgan Stanley	03/29/2019	18,140	1.36243	13,361	13,314	_	(47)
Sell	Euro	Credit Suisse	03/29/2019	(1,306,032)	0.86626	(1,502,774)	(1,507,668)	_	(4,894)
Sell	Japanese Yen	Bank of America	03/29/2019	(47,550,508)	108.80507	(425,798)	(437,025)	_	(11,227)
Buy	Japanese Yen	Bank of America	03/29/2019	1,741,343	108.80504	15,884	16,004	120	_
Sell	Norwegian Krone	Goldman Sachs	03/29/2019	(8,706,415)	8.61296	(999,588)	(1,010,850)	_	(11,262)
Buy	Norwegian Krone	Goldman Sachs	03/29/2019	369,723	8.61296	42,565	42,926	361	_
Sell	Pound Sterling	JP Morgan	03/29/2019	(556,437)	0.78118	(707,513)	(712,299)	_	(4,786)
Sell	Swedish Krona	Goldman Sachs	03/29/2019	(4,841,013)	8.79979	(537,956)	(550,128)	_	(12,172)
Buy	Swedish Krona	Goldman Sachs	03/29/2019	126,796	8.79979	14,110	14,409	299	_ <u></u>
	Total							\$5,871	\$(44,388)

# Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 SMID Cap Growth Fund

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 94.9%					
Aerospace & Defense — 0.9%			Computers — 0.7%		
HEICO Corp., Class A	8,859	\$ 558,117	ForeScout Technologies, Inc.*	17,096	\$ 444,325
Apparel — 0.8%			Distribution & Wholesale — 0.6%		
Canada Goose Holdings, Inc.*	2,753	120,361	SiteOne Landscape Supply, Inc.*	6,332	349,970
Carter's, Inc.	4,527	369,494	Diversified Financial Services — 3.9%		
		489,855	Affiliated Managers Group, Inc.	3,703	360,820
Banks — 4.5%			Cboe Global Markets, Inc.	6,762	661,526
Amalgamated Bank, Class A	22,657	441,812	Lazard Ltd., Class A	24,836	916,697
Eagle Bancorp, Inc.*	22,389	1,090,568	SLM Corp.*	48,428	402,437
First Republic Bank	3,067	266,522			2,341,480
Glacier Bancorp, Inc.	11,441	453,292	Electronics — 3.1%		
Signature Bank	4,250	436,943	Badger Meter, Inc.	10,391	511,341
		2,689,137	Keysight Technologies, Inc.*	4 <b>,</b> 957	307,731
Beverages — 1.3%			PerkinElmer, Inc.	5,622	441,608
MGP Ingredients, Inc.	13,562	773,712	Sensata Technologies Holding PLC*	13,381	600,004
9	15,502	773,712			1,860,684
Biotechnology — 7.4%		=0=			.,,
ACADIA Pharmaceuticals, Inc.*	25,404	410,783	Entertainment — 1.3%	2 724	707 202
Alder Biopharmaceuticals, Inc.* Amarin Corp. PLC ADR*	34,428	352,887	Vail Resorts, Inc.	3,734	787,202
Bluebird Bio, Inc.*	16,282 4,570	221,598 453,344	Environmental Control — 0.6%		
ElectroCore, Inc.*	16,582	103,803	Evoqua Water Technologies Corp.*	14,897	143,011
Evelo Biosciences, Inc.*	8,449	109,921	U.S. Ecology, Inc.	3,035	191,145
Exact Sciences Corp.*	7,400	466,940			334,156
Exelixis, Inc.*	25,992	511,263	Healthcare Products — 6.2%		
Guardant Health, Inc.*	6,692	251,552	ABIOMED, Inc.*	798	259,382
Incyte Corp.*	5,006	318,332	Axonics Modulation Technologies, Inc.*	11,227	169,640
Rigel Pharmaceuticals, Inc.*	59,335	136,471	IDEXX Laboratories, Inc.*	1,536	285,727
Sage Therapeutics, Inc.*	1,496	143,302	SI-BONE, Inc.*	6,926	144,684
Spark Therapeutics, Inc.*	7,875	308,227	Tandem Diabetes Care, Inc.*	4,188	159,018
Synthorx, Inc.* UNITY Biotechnology, Inc.*	15,835 13,902	275,212 226,047	Teleflex, Inc.	5,382	1,391,140
Y-mAbs Therapeutics, Inc.*	7,036	143,112	The Cooper Cos., Inc.	2,062	524,779
Times Therapeaties, inc.	7,050		West Pharmaceutical Services, Inc.	7,973	781,593
		4,432,794			3,715,963
Building Materials — 1.0%			Healthcare Services — 1.6%		
Fortune Brands Home & Security, Inc.	8,976	340,998	Acadia Healthcare Co., Inc.*	13,441	345,568
Summit Materials, Inc., Class A*	21,764	269,874	Medpace Holdings, Inc.*	6,613	350,026
		610,872	Teladoc Health, Inc.*	5,514	273,329
Chemicals — 1.1%					968,923
Ashland Global Holdings, Inc.	9,325	661,702	Home Builders — 1.0%		
-			M/I Homes, Inc.*	18,794	395,050
Commercial Services — 9.4% Bright Horizons Family Solutions, Inc.*	10,013	1,115,949	Winnebago Industries, Inc.	7,156	173,247
Euronet Worldwide, Inc.*	4,264	436,549	,	,	568,297
Gartner, Inc.*	2,475	316,404			
Global Payments, Inc.	10,779	1,111,638	Household Products & Wares — 1.5%		
Green Dot Corp., Class A*	6,100	485,072	Avery Dennison Corp.	9,739	874,854
Healthcare Services Group, Inc.	12,818	515,027	Internet — 6.4%		
HealthEquity, Inc.*	10,062	600,198	Farfetch Ltd., Class A*	5,442	96,378
Rollins, Inc.	4,592	165,771	GoDaddy, Inc., Class A*	25,093	1,646,603
Total System Services, Inc.	11,020	895,816	GrubHub, Inc.*	2,824	216,911
		5,642,424	IAC/InterActive Corp.*	4,265	780,666
			Proofpoint, Inc.* Upwork, Inc.*	1,806 8,420	151,361 152,486
			opwork, inc.	8,420	152,486

# Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 SMID Cap Growth Fund

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Internet — (continued)			Semiconductors — 2.8%		
Wix.com Ltd.*	3,565	\$ 322,062	Advanced Micro Devices, Inc.*	24,287	\$ 448,338
Zendesk, Inc.*	8,485	495,269	Marvell Technology Group Ltd.	52,620	851,918
		3,861,736	MKS Instruments, Inc.	6,201	400,646
			,	-, -	1,700,902
Lodging — 1.5%					1,700,902
Choice Hotels International, Inc.	12,375	885,802	Software — 14.0%		
Machinery — Diversified — 4.0%			Black Knight Inc.*	50,330	2,267,870
Cognex Corp.	18,378	710,677	Cadence Design Systems, Inc.*	22,939	997,388
IDEX Corp.	4,090	516,403	Coupa Software, Inc.*	6,043	379,863
Welbilt, Inc.*	37,406	415,581	InterXion Holding N.V.*	14,939	809,096
Xylem, Inc.	11,340	756,605	MSCI, Inc.	2,033	299,725
		2,399,266	PTC, Inc.*	12,507	1,036,830
			Splunk, Inc.*	4,428	464,276
Metal Fabricate/Hardware — 1.0%			Tableau Software, Inc., Class A*	3,599	431,880
Mueller Water Products, Inc., Class A	16,583	150,905	Take-Two Interactive Software, Inc.*	4,940	508,524
RBC Bearings, Inc.*	3,325	435,908	The Ultimate Software Group, Inc.*	3,531	864,636
		586,813	Veeva Systems, Inc., Class A*	3,695	330,037
Miscellaneous Manufacturing — 1.39					8,390,125
Miscellaneous Manufacturing — 1.3%  John Bean Technologies Corp.	10,604	761 //73	Telecommunications — 1.1%		
John Bean rechnologies Corp.	10,004	761,473	Viavi Solutions, Inc.*	51,167	514,228
Oil & Gas — 0.8%			Zayo Group Holdings, Inc.*	6 <b>,</b> 597	150,676
Centennial Resource Development, Inc.,			Zayo Group Holaings, Inc.	0,557	
Class A*	12,020	132,460			664,904
Diamondback Energy, Inc.	2,010	186,327	Transportation — 1.9%		
Parsley Energy, Inc., Class A*	8,679	138,691	Old Dominion Freight Line, Inc.	9,233	1,140,183
		457,478	TOTAL COMMON STOCKS		
Dhawaaaatiada 7.3%					E6 020 007
Pharmaceuticals — 7.2%	9.400	272.006	(Cost \$58,729,135)		56,838,087
Agios Pharmaceuticals, Inc.* Alkermes PLC*	8,109	373,906	REAL ESTATE INVESTMENT TRUSTS — 0.9%		
Aratana Therapeutics, Inc.*	18,087 8,627	533,747 52,883	Diversified 0.0%		
BioSpecifics Technologies Corp.*	2,943	178,346	Diversified — 0.9% SBA Communications Corp.*		
DexCom, Inc.*	3,021	361,916	(Cost \$342,499)	3,207	519,181
Elanco Animal Health, Inc.*	12,597	397,183	(Cost \$742,477)	J,207	719,101
GW Pharmaceuticals PLC ADR*	2,202	214,453	SHORT-TERM INVESTMENTS — 2.2%		
Heska Corp.*	1,786	153,775	BlackRock Liquidity Funds FedFund		
Marinus Pharmaceuticals, Inc.*	56,085	160,964	Portfolio — Institutional Shares		
Moderna, Inc.*	17,063	260,552	(Cost \$1,348,089)	1,348,089	1,348,089
Neogen Corp.*	6,889	392,673	, , , ,	.,5 10,005	
Neurocrine Biosciences, Inc.*	1,599	114,185	TOTAL INVESTMENTS — 98.0%		
PRA Health Sciences, Inc.*	4,723	434,327	(Cost \$60,419,723)		58,705,357
Proteostasis Therapeutics, Inc.*	34,356	111,313	Other Assets & Liabilities — 2.0%		1,176,307
Sarepta Therapeutics, Inc.*	5,353	584,173	TOTAL NET ASSETS — 100.0%		\$59,881,664
,	- /	4,324,396	101ALNL1 A33L13 — 100.0%		\$77,001,004
		7,727,770			
Real Estate — 0.4%			† See Security Valuation Note.		
HFF, Inc., Class A	6,387	211,793	* Non-income producing security.		
Retail — 5.6%			ADR — American Depository Receipt.		
Burlington Stores, Inc.*	3,940	640,920	PLC — Public Limited Company.		
Domino's Pizza, Inc.	2,232	553,513	. 20 Tublic Ellineca Company.		
Dunkin' Brands Group, Inc.	15,549	997,002			
Five Below, Inc.*	6,068	620,878			
Wingstop, Inc.	8,357	536,436			
05207,	<u> </u>				
		3,348,749			

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 SMID Cap Growth Fund

Country Weightings as of 12/31/2018††

United States	93%
Bermuda	2
Bangladesh	1
Ireland	1
Israel	1
Netherlands	1
United Kingdom	1
Total	100%

 $\dagger$  % of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

SS			

Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON STOCKS	\$56,838,087	\$56,838,087	\$—	\$
REAL ESTATE				
INVESTMENT TRUSTS	519,181	519,181	_	_
SHORT-TERM				
INVESTMENTS	1,348,089	1,348,089		
TOTAL INVESTMENTS	\$58,705,357	\$58,705,357	\$—	\$

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 87.4%					
Aerospace & Defense — 0.4%  AAR Corp.	8,036	\$ 300,064	Electrical Components & Equipment — 0.9% EnerSys	9,859	\$ 765,157
Airlines — 3.4%		<del></del>	Electronics — 1.4%	,,0)	7 700,107
Alaska Air Group, Inc.	18,850	1,147,022	Avnet, Inc.	28,140	1,015,854
Hawaiian Holdings, Inc.	26,410	697,488	Sanmina Corp.*	5,360	128,962
SkyWest, Inc.	21,161	941,030	F	2/2	1,144,816
		2,785,540	Engineering 9 Construction 2.4%		.,.,,,,,,,
Apparel — 0.9%			Engineering & Construction — 2.4% AECOM*	24,114	639,021
Skechers U.S.A., Inc., Class A*	30,710	702,952	Granite Construction, Inc.	17,280	696,039
Auto Manufacturers — 1.1%			Tutor Perini Corp.*	39,360	628,579
Oshkosh Corp.	14,230	872,441			1,963,639
Auto Parts & Equipment — 1.6%			Food — 3.8%		
Cooper-Standard Holdings, Inc.*	9,624	597,843	Ingredion, Inc.	9,682	884,935
Lear Corp.	5,551	681,996	Nomad Foods Ltd.*	56,500	944,680
•	•	1,279,839	US Foods Holding Corp.*	40,729	1,288,665
Barda 0.0%					3,118,280
Banks — 9.9% Associated Banc-Corp.	40,200	795,558	Gas — 1.0%		
BankUnited, Inc.	35,498	1,062,810	Southwest Gas Holdings, Inc.	10,890	833,085
Comerica, Inc.	13,065	897,435		10,000	
Huntington Bancshares, Inc.	45,853	546,568	Hand & Machine Tools — 1.2% Regal Beloit Corp.	13,727	961,576
Synovus Financial Corp.	23,592	754,708		13,727	901,570
Texas Capital Bancshares, Inc.*	17,022	869,654	Healthcare Services — 3.2%	0.000	
Umpqua Holdings Corp.	57 <b>,</b> 184	909,226	ICON PLC*	8,938	1,154,879
Webster Financial Corp. Zions Bancorp NA	16,888 32,603	832,409 1,328,246	Molina Healthcare, Inc.* WellCare Health Plans, Inc.*	7,120 2,716	827,486 641,221
zions suncorp i vi	52,005	7,996,614	Wencare meanth hans, men	2,7 10	2,623,586
		7,990,014			2,023,300
Beverages — 1.2%	69.604	056.308	Home Builders — 2.0%	22.567	992.409
Cott Corp.	68,601	956,298	Lennar Corp., Class A Taylor Morrison Home Corp., Class A*	22,567 46,590	883,498 740,781
Chemicals — 0.9%			rayior morrison frome corp., class A	70,550	
Orion Engineered Carbons SA	29,030	733,878			1,624,279
Commercial Services — 3.4%			Insurance — 10.4%		
Booz Allen Hamilton Holding Corp.	20,188	909,873	American Financial Group, Inc.	10,094	913,810
Quanta Services, Inc.	30,031	903,933	Essent Group Ltd.* Everest Re Group Ltd.	28,174 7,750	962,987 1,687,640
Sotheby's*	22,842	907,741	First American Financial Corp.	22,498	1,007,010
		2,721,547	Kemper Corp.	1,870	124,131
Computers — 3.9%			Old Republic International Corp.	39,480	812,103
Genpact Ltd.	43,340	1,169,747	Reinsurance Group of America, Inc.	11,390	1,597,220
NCR Corp.*	47,736	1,101,747	Selective Insurance Group, Inc.	11,186	681,675
NetScout Systems, Inc.*	36,570	864,149	The Hanover Insurance Group, Inc.	5,720	667,924
		3,135,643			8,451,801
Diversified Financial Services — 0.7%			Internet — 1.0%		
OneMain Holdings, Inc.*	23,520	571,301	CDW Corp.	3,920	317,716
Electric — 4.6%			Criteo SA ADR*	20,069	455,968
Alliant Energy Corp.	28,558	1,206,575			773,684
Black Hills Corp.	11,611	728,939	Machinery — Construction & Mining — 0.6%		
PNM Resources, Inc. Portland General Electric Co.	20,350	836,181	Terex Corp.	18,800	518,316
i oi dalla dellerar Liectife Co.	20,749	951,342	Machinery — Diversified — 0.5%		
		3,723,037	SPX FLOW, Inc.*	12,164	370,029

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Media — 1.5%			Telecommunications — (continued)		
Houghton Mifflin Harcourt Co.*	73,340	\$ 649,793	Anixter International, Inc.*	4,860	\$ 263,946
Scholastic Corp.	13,390	539,081	Finisar Corp.*	59,030	1,275,048
		1,188,874			2,389,283
Mining — 0.9%			Transportation — 0.5%		
Alcoa Corp.*	27,710	736,532	Atlas Air Worldwide Holdings, Inc.*	10,430	440,042
Miscellaneous Manufacturing — 1.1%			TOTAL COMMON STOCKS		
Trinseo SA	18,730	857,459	(Cost \$77,209,741)		70,706,048
Office Furnishings — 0.9%					
Steelcase, Inc., Class A	48,260	715,696	REAL ESTATE INVESTMENT TRUSTS — 11.1%		
Oil & Gas — 3.7%			Apartments — 3.2%		
HollyFrontier Corp.	9,960	509,155	American Campus Communities, Inc.	31,352	1,297,659
Oasis Petroleum, Inc.*	96,680	534,641	Camden Property Trust	14,528	1,279,191
Patterson-UTI Energy, Inc.	56,040	580,014			2,576,850
QEP Resources, Inc.*	125,403	706,019	Diversified — 1.4%		
SM Energy Co.	41,540	643,039	STAG Industrial, Inc.	44,330	1,102,930
		2,972,868	,	11,550	
Oil & Gas Services — 3.3%			Hotels & Resorts — 2.2%	20.247	004.464
Dril-Quip, Inc.*	16,995	510,360	MGM Growth Properties LLC, Class A	30,347	801,464
Helix Energy Solutions Group, Inc.*	48,160	260,546	Park Hotels & Resorts, Inc.	37,628	977,576
MRC Global, Inc.*	49,020	599,514			1,779,040
Oil States International, Inc.*	34,880	498,086	Manufactured Homes — 1.5%		
RPC, Inc.	55,980	552,523	Sun Communities, Inc.	11,690	1,188,990
SRC Energy, Inc.*	50,440	237,068		ŕ	
		2,658,097	Office Property — 1.3% Empire State Realty Trust, Inc., Class A	75 7/19	1 070 770
Packaging and Containers — 1.3%			Empire State Realty Trust, Inc., Class A	75,248	1,070,779
Graphic Packaging Holding Co.	76,504	814,002	Storage & Warehousing — 1.5%		
Sealed Air Corp.	6,901	240,431	CubeSmart	43,108	1,236,768
		1,054,433	TOTAL REAL ESTATE INVESTMENT TRUSTS		
Retail — 3.7%			(Cost \$9,547,962)		8,955,357
Bloomin' Brands, Inc.	57,960	1,036,904			
BMC Stock Holdings, Inc.*	36,747	568,843	SHORT-TERM INVESTMENTS — 0.5%		
Signet Jewelers Ltd.	19,380	615,703	BlackRock Liquidity Funds FedFund Portfolio		
The Michaels Cos., Inc.*	54,970	744,294	<ul> <li>— Institutional Shares</li> </ul>		
		2,965,744	(Cost \$429,014)	429,014	429,014
Savings & Loans — 1.2%			TOTAL INVESTMENTS — 99.0%		
Sterling Bancorp	57,260	945,363	(Cost \$87,186,717)		80,090,419
	37,200		Other Assets & Liabilities — 1.0%		828,198
Semiconductors — 2.9%	(( 390	044 254	TOTAL NET ACCETS 400.0%		
Cypress Semiconductor Corp.	66,380	844,354	TOTAL NET ASSETS — 100.0%		\$80,918,617
Kulicke & Soffa Industries, Inc. MaxLinear, Inc.*	20,309 37,717	411,663 663,819			
Mellanox Technologies Ltd.*	4,320	399,082	† See Security Valuation Note.		
menanon realmotogres atai	1,520		* Non-income producing security.		
		2,318,918	ADR — American Depository Receipt.		
Software — 3.1%			LLC — Limited Liability Company.		
CommVault Systems, Inc.*	9,150	540,673	NA — National Association.		
Nuance Communications, Inc.*	69,746	922,740	PLC — Public Limited Company.		
Verint Systems, Inc.*	25,335	1,071,924	,		
		2,535,337			
Telecommunications — 2.9%					
Amdocs Ltd.	14,515	850,289			

Country Weightings as of 12/31/2018††

United States	92%
Bermuda	2
Ireland	2
Canada	1
France	1
Slovenia	1
United Kingdom	1
Total	100%

 $\dagger$  % of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE

Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON STOCKS	\$70,706,048	\$70,706,048	\$—	\$
REAL ESTATE INVESTMENT TRUSTS	8,955,357	8,955,357	_	_
SHORT-TERM	, ,	, ,		
INVESTMENTS	429,014	429,014		
TOTAL INVESTMENTS	\$80,090,419	\$80,090,419	\$—	\$—

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 94.5%		<del></del>			<u> </u>
Advertising — 0.6%			Diversified Financial Services — (continued)		
Yext, Inc.*	40,363	\$ 599,390	SLM Corp.*	60,639	\$ 503,910
Aerospace & Defense — 2.0%					2,236,444
HEICO Corp., Class A	28,899	1,820,637	Electrical Components & Equipment — 2.3%		
Apparel — 0.6%			Belden, Inc.	23,770	992,873
Carter's, Inc.	7,433	606,681	EnerSys	7,835	608,074
	,		Novanta, Inc.*	8,833	556,479
Auto Parts & Equipment — 0.6% Visteon Corp.*	9,299	560,544			2,157,426
•	3,233		Electronics — 1.9%		
Banks — 0.7% Kearny Financial Corp.	47,574	609,899	National Instruments Corp.	10,401	471,997
·	47,374	009,899	OSI Systems, Inc.*	10,489	768,844
Biotechnology — 3.9%	5 730	266.004	Sensata Technologies Holding PLC*	11,147	499,831
AnaptysBio, Inc.*	5,739	366,091			1,740,672
BioCryst Pharmaceuticals, Inc.* Biohaven Pharmaceutical Holding Co., Ltd.*	46,981 13,298	379,137 491,760	Engineering & Construction — 0.6%		
Insmed, Inc.*	33,283	436,673	frontdoor, Inc.*	20,085	534,462
Ligand Pharmaceuticals, Inc.*	4,071	552,435	Entertainment — 2.3%		
NeoGenomics, Inc.*	67,942	856,748	AMC Entertainment Holdings, Inc., Class A	50,715	622,780
Puma Biotechnology, Inc.*	12,306	250,427	Cedar Fair LP	19,532	923,864
WaVe Life Sciences Ltd.*	6,929	291,295	Manchester United PLC, Class A	32,130	609,827
		3,624,566			2,156,471
Building Materials — 0.4%			Environmental Control 0.3%		
Summit Materials, Inc., Class A*	29,017	359,811	Environmental Control — 0.3% Clean Harbors, Inc.*	5,823	287,365
Chemicals — 4.2%				7,027	207,505
CSW Industrials, Inc.*	23,710	1,146,379	Food — 0.5%	42 495	464706
H.B. Fuller Co.	19,504	832,236	Hostess Brands, Inc.*	42,485	464,786
Rogers Corp.*	7,239	717,095	Forest Products & Paper — 0.6%		
Sensient Technologies Corp.	22,458	1,254,279	Neenah, Inc.	8,829	520,205
		3,949,989	Hand & Machine Tools — 1.1%		
Commercial Services — 11.0%			Kennametal, Inc.	19,442	647,030
CoStar Group, Inc.*	1,481	499,601	Milacron Holdings Corp.*	29,307	348,460
Euronet Worldwide, Inc.*	16,599	1,699,406			995,490
Gartner, Inc.*	2,823	360,892	Healthcare Products — 8.7%		
Healthcare Services Group, Inc.	23,713	952,788	AngioDynamics, Inc.*	40,340	812,044
HealthEquity, Inc.* K12, Inc.*	7,871 35,956	469,505 891,349	Bio-Techne Corp.	6,279	908,697
LendingTree, Inc.*	2,206	484,372	Bruker Corp.	26,420	786,523
MarketAxess Holdings, Inc.	3,357	709,368	Glaukos Corp.*	12,221	686,454
MAXIMUS, Inc.	10,103	657,604	Globus Medical, Inc., Class A* ICU Medical, Inc.*	14,466 4,196	626,088 963,527
ServiceMaster Global Holdings, Inc.*	46,799	1,719,395	Merit Medical Systems, Inc.*	7,872	439,336
TriNet Group, Inc.*	19,215	806,069	Natus Medical, Inc.*	26,726	909,486
WEX, Inc.*	7,030	984,622	RA Medical Systems, Inc.*	30,068	239,041
		10,234,971	STERIS PLC	16,555	1,768,902
Computers — 1.1%					8,140,098
Kornit Digital Ltd.*	28,217	528,222	Healthcare Services — 1.8%		
LivePerson, Inc.*	25,077	472,952	Catalent, Inc.*	53,158	1,657,466
		1,001,174	Home Builders — 0.4%	,	
Diversified Financial Services — 2.4%			Thor Industries, Inc.	7,466	388,232
LPL Financial Holdings, Inc.	28,365	1,732,534		,,100	
-			Hotels & Resorts — 0.4%	48,349	2/17 620
			Playa Hotels & Resorts N.V.*	70,247	347,629

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Household Products & Wares — 0.7%			Retail — (continued)		
Ontex Group N.V.	30,563	\$ 626,677	Texas Roadhouse, Inc.	10,788	\$ 644,044
Insurance — 1.0%			The Lovesac Co.*	32,502	745,596
RLI Corp.	14,112	973,587	Williams-Sonoma, Inc.	11,422	576,240
NEI COIP.	17,112	777,507			3,644,879
Internet — 3.2%			Sovings & Loops 0.4%		
ChannelAdvisor Corp.*	50,454	572,653	Savings & Loans — 0.4% Pacific Premier Bancorp, Inc.*	13,961	256 205
Farfetch Ltd., Class A*	21,488	380,552	racine rienner bancorp, inc."	13,901	356,285
MakeMyTrip Ltd.*	19,157	466,090	Semiconductors — 2.5%		
The Trade Desk, Inc., Class A*	5,728	664,792	CTS Corp.	18,798	486,680
Zendesk, Inc.*	15,295	892,769	Entegris, Inc.	23,952	668,141
		2,976,856	ON Semiconductor Corp.*	70,854	1,169,800
Machinery - Diversified — 2.0%					2,324,621
Gates Industrial Corp. PLC*	41,510	549,592	Software — 14.2%		
Nordson Corp.	6,471	772,314	ACI Worldwide, Inc.*	20,126	556,886
Wabtec Corp.	8,414	591,084	athenahealth, Inc.*	4,045	533,657
•		1,912,990	Blackbaud, Inc.	20,546	1,292,343
		1,512,550	Broadridge Financial Solutions, Inc.	17,399	1,674,654
Metal Fabricate/Hardware — 1.2%			Cadence Design Systems, Inc.*	32,842	1,427,970
Rexnord Corp.*	50,782	1,165,447	Cision Ltd.*	72,494	848,180
Miscellaneous Manufacturing — 4.7%			Envestnet, Inc.*	21,272	1,046,370
Carlisle Cos., Inc.	12,954	1,302,136	Guidewire Software, Inc.*	9,005	722,471
Hillenbrand, Inc.	19,135	725,790	Instructure, Inc.*	17,387	652,186
ITT, Inc.	20,130	971,675	Jack Henry & Associates, Inc.	6,215	786,322
Proto Labs, Inc.*	4,234	477,553	RealPage, Inc.*	17,852	860,288
Standex International Corp.	13,938	936,355	SS&C Technologies Holdings, Inc.	43,536	1,963,909
		4,413,509	The Descartes Systems Group, Inc.*	34,451	909,222
011.9.6 0.6%					13,274,458
Oil & Gas — 0.6% Magnolia Oil & Gas Corp.*	52 675	500 487	Telecommunications — 2.4%		
Magnolla Oli & das Corp."	52,675	590,487	Nice Ltd. ADR*	20,322	2,199,044
Pharmaceuticals — 6.6%				20,722	2,177,044
Amicus Therapeutics, Inc.*	35,916	344,075	Transportation — 1.4%		
Diplomat Pharmacy, Inc.*	36,743	494,561	Old Dominion Freight Line, Inc.	4,808	593,740
Eagle Pharmaceuticals, Inc.*	12,880	518,935	Saia, Inc.*	11,990	669,282
Enanta Pharmaceuticals, Inc.*	5,354	379,224			1,263,022
FibroGen, Inc.*	10,345	478,767	TOTAL COMMON STOCKS		
Global Blood Therapeutics, Inc.* GW Pharmaceuticals PLC ADR*	9,175 4,370	376,634 425,594	(Cost \$72,416,948)		88,091,896
Heron Therapeutics, Inc.*	24,349	631,613	(====,==,==,==,		
Heska Corp.*	5,169	445,051	REAL ESTATE INVESTMENT TRUSTS — 0.9%		
Ironwood Pharmaceuticals, Inc.*	31,720	328,619	Diversified — 0.9%		
Knight Therapeutics, Inc.*	66,568	374,969	Lamar Advertising Co., Class A		
Neurocrine Biosciences, Inc.*	8,406	600,273	(Cost \$708,309)	12,840	888,271
Prestige Consumer Healthcare, Inc.*	23,881	737,445	(COSC \$700,505)	12,040	000,271
,	-,	6,135,760	SHORT-TERM INVESTMENTS — 2.9%		
		0,199,700			
Publishing / Newspapers — 0.9%			BlackRock Liquidity Funds FedFund Portfolio—Institutional Shares		
Cimpress N.V.*	7,949	822,086	(Cost \$2,705,979)	2,705,979	2,705,979
Real Estate — 0.4%				∠,1 ∪J,∃1 ∃	2,100,119
Jones Lang LaSalle, Inc.	3,300	417,780	TOTAL INVESTMENTS — 98.3%		
			(Cost \$75,831,236)		91,686,146
Retail — 3.9% Casey's General Stores, Inc.	4,194	537,419	Other Assets & Liabilities — 1.7%		1,556,897
Dunkin' Brands Group, Inc.	11,852	759,950	TOTAL NET ASSETS — 100.0%		\$93,243,043
Sally Beauty Holdings, Inc.*	22,383	381,630	100000		
Jany Deadty Holdings, Ilic.	ر٥ر,٢٢	טנט,ו טנ			

† See Security Valuation Note.

ADR — American Depository Receipt.

LP — Limited Partnership.

PLC — Public Limited Company.

Country Weightings as of 12/31/2018#

United States	89%
Israel	3
United Kingdom	3
Canada	2
Belgium	1
India	1
Netherlands	1
Total	100%

 $\dagger\dagger$  % of total investments as of December 31, 2018.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

#### ASSETS TABLE

Description         Market Value at 12/31/2018         Level 1 Quoted Price         Significant Unobservable Input         Unobservable Unobservable Unobservable Unobservable Unobservable Unobservable Unobservable Input           COMMON STOCKS         Advertising         \$ 599,390         \$ 599,390         \$ 590,390         <		Total		Level 2	Level 3
Advertising \$ 599,390 \$ 599,390 \$ — \$— Aerospace & Defense	Description	Market Value at	Quoted	Significant Observable	Significant Unobservable
Aerospace & Defense         1,820,637         1,820,637         —           Apparel         606,681         606,681         —           Auto Parts & Equipment         560,544         560,544         —           Banks         609,899         609,899         —           Biotechnology         3,624,566         3,624,566         —           Building Materials         359,811         359,811         —           Chemicals         3,949,989         3,949,989         —           Commercial Services         10,234,971         10,234,971         —           Computers         1,001,174         1,001,174         —           Diversified Financial         Services         2,236,444         2,236,444         —           Electrical Components         & Equipment         2,157,426         2,157,426         —         —           Electronics         1,740,672         1,740,672         —         —         —           Electronics         2,157,426         2,157,426         —         —         —           Engineering &         Construction         534,462         534,462         —         —           Entertainment         2,156,471         2,156,471         —	COMMON STOCKS				
Aerospace & Defense         1,820,637         1,820,637         —           Apparel         606,681         606,681         —           Auto Parts & Equipment         560,544         560,544         —           Banks         609,899         609,899         —           Biotechnology         3,624,566         3,624,566         —           Building Materials         359,811         359,811         —           Chemicals         3,949,989         3,949,989         —           Commercial Services         10,234,971         10,234,971         —           Computers         1,001,174         1,001,174         —           Diversified Financial         Services         2,236,444         2,236,444         —           Services         2,236,444         2,236,444         —         —           Electrical Components         & Equipment         2,157,426         2,157,426         —         —           & Electronics         1,740,672         1,740,672         —         —         —         —           Electronics         1,740,672         1,740,672         —         —         —         —           Engineering & Construction         534,462         534,462         —	Advertising	\$ 599,390	\$ 599,390	\$ —	\$—
Auto Parts & Equipment Banks 609,899 609,899 — — — — — — — — — — — — — — — — — —	Aerospace & Defense	1,820,637	1,820,637	_	_
Banks 609,899 609,899 — — Biotechnology 3,624,566 3,624,566 — — Building Materials 359,811 359,811 — — Chemicals 3,949,989 3,949,989 — — Commercial Services 10,234,971 10,234,971 — — Computers 1,001,174 1,001,174 — — Diversified Financial Services 2,236,444 2,236,444 — — Electrical Components & Equipment 2,157,426 2,157,426 — — Electronics 1,740,672 1,740,672 — — Engineering & Construction 534,462 534,462 — — Entertainment 2,156,471 2,156,471 — — Environmental Control 287,365 287,365 — — Food 464,786 464,786 — — Forest Products & Paper 464,786 464,786 — — Forest Products & Paper 499,490 995,490 — — Healthcare Products 8,140,098 8,140,098 — — Healthcare Services 1,657,466 1,657,466 — — Home Builders 388,232 — — Hotels & Resorts 147,629 347,629 — — Household Products & Wares 626,677 — 626,677 — Insurance 973,587 973,587 — — Hardware 1,165,447 1,165,447 — — Miscellaneous Manufacturing 4,413,509 4,413,509 — —	Apparel	606,681	606,681	_	_
Biotechnology 3,624,566 3,624,566 — — — Building Materials 359,811 359,811 — — — — — — — — — — — — — — — — — —	Auto Parts & Equipment	560,544	560,544	_	_
Building Materials 359,811 359,811 — — — — — — — — — — — — — — — — — —	Banks	609,899	609,899	_	_
Chemicals         3,949,989         3,949,989         —           Commercial Services         10,234,971         10,234,971         —           Computers         1,001,174         1,001,174         —           Diversified Financial         —         —           Services         2,236,444         2,236,444         —           Electrical Components         & Equipment         2,157,426         2,157,426         —           & Equipment         2,157,426         2,157,426         —         —           Electronics         1,740,672         —         —         —           Engineering &         —         —         —         —         —           Construction         534,462         534,462         —         —         —         —           Entertainment         2,156,471         2,156,471         —	Biotechnology	3,624,566	3,624,566	_	_
Commercial Services 10,234,971 10,234,971 — — — — — — — — — — — — — — — — — — —	Building Materials	359,811	359,811	_	_
Computers         1,001,174         1,001,174         —           Diversified Financial Services         2,236,444         2,236,444         —           Services         2,236,444         2,236,444         —           Electrical Components         & Equipment         2,157,426         2,157,426         —           & Electronics         1,740,672         1,740,672         —         —           Eingineering & Construction         534,462         534,462         —         —           Entertainment         2,156,471         2,156,471         —         —           Environmental Control         287,365         287,365         —         —           Food         464,786         464,786         —         —           Forest Products & Paper         520,205         520,205         —         —           Healthcare Products & R140,098         8,140,098         —         —           Healthcare Services         1,657,466         —         —           Home Builders         388,232         388,232         —         —           Household Products & Wares         626,677         —         626,677         —           Household Products & Wares         626,677         —         <	Chemicals	3,949,989	3,949,989	_	_
Diversified Financial Services 2,236,444 2,236,444 — — — Electrical Components & Equipment 2,157,426 2,157,426 — — — Electronics 1,740,672 1,740,672 — — — Engineering & — — — — — — — — — — — — — — — — — —	Commercial Services	10,234,971	10,234,971	_	_
Services         2,236,444         2,236,444         —           Electrical Components         & Equipment         2,157,426         2,157,426         —           & Equipment         1,740,672         1,740,672         —         —           Electronics         1,740,672         1,740,672         —         —           Engineering &         —	Computers	1,001,174	1,001,174	_	_
Electrical Components	Diversified Financial				
& Equipment       2,157,426       2,157,426       —         Electronics       1,740,672       1,740,672       —         Engineering &       —       —         Construction       534,462       534,462       —         Entertainment       2,156,471       2,156,471       —         Environmental Control       287,365       287,365       —         Food       464,786       464,786       —         Forest Products & Paper       520,205       520,205       —         Hand & Machine Tools       995,490       995,490       —         Healthcare Products       8,140,098       8,140,098       —         Healthcare Services       1,657,466       1,657,466       —         Home Builders       388,232       388,232       —         Household Products &       Wares       626,677       —       626,677       —         Insurance       973,587       973,587       —       —         Internet       2,976,856       2,976,856       —       —         Machinery - Diversified       1,912,990       1,912,990       —       —         Metal Fabricate/       Hardware       1,165,447       1,165,447       —       <	Services	2,236,444	2,236,444	_	_
Electronics         1,740,672         1,740,672         —           Engineering &         534,462         534,462         —           Construction         534,462         534,462         —           Entertainment         2,156,471         2,156,471         —           Environmental Control         287,365         287,365         —           Food         464,786         464,786         —           Forest Products & Paper         520,205         520,205         —           Hand & Machine Tools         995,490         995,490         —           Healthcare Products         8,140,098         8,140,098         —           Healthcare Services         1,657,466         1,657,466         —           Home Builders         388,232         388,232         —           Household Products &         Wares         626,677         —         626,677         —           Household Products &         973,587         973,587         —         —           Insurance         973,587         973,587         —         —           Machinery - Diversified         1,912,990         1,912,990         —         —           Metal Fabricate/         Hardware         1,165,447	Electrical Components				
Engineering &  Construction 534,462 534,462 — —  Entertainment 2,156,471 2,156,471 — —  Environmental Control 287,365 287,365 — —  Food 464,786 464,786 — —  Forest Products & Paper 520,205 520,205 — —  Hand & Machine Tools 995,490 995,490 — —  Healthcare Products 8,140,098 8,140,098 — —  Healthcare Services 1,657,466 1,657,466 — —  Home Builders 388,232 388,232 — —  Household Products &  Wares 626,677 — 626,677 —  Insurance 973,587 973,587 — —  Internet 2,976,856 2,976,856 — —  Machinery - Diversified 1,912,990 1,912,990 — —  Metal Fabricate/  Hardware 1,165,447 1,165,447 — —  Miscellaneous  Manufacturing 4,413,509 4,413,509 — —	& Equipment	2,157,426	2,157,426	_	_
Construction         534,462         534,462         —         —           Entertainment         2,156,471         2,156,471         —         —           Environmental Control         287,365         287,365         —         —           Food         464,786         464,786         —         —           Forest Products & Paper         520,205         520,205         —         —           Hand & Machine Tools         995,490         995,490         —         —           Healthcare Products         8,140,098         8,140,098         —         —           Healthcare Services         1,657,466         —         —         —           Home Builders         388,232         388,232         —         —           Hotels & Resorts         347,629         347,629         —         —           Household Products &         Wares         626,677         —         626,677         —           Insurance         973,587         973,587         —         —           Internet         2,976,856         2,976,856         —         —           Machinery - Diversified         1,912,990         1,912,990         —         —           Metal Fabricate/ </td <td>Electronics</td> <td>1,740,672</td> <td>1,740,672</td> <td>_</td> <td>_</td>	Electronics	1,740,672	1,740,672	_	_
Entertainment 2,156,471 2,156,471 — — — Environmental Control 287,365 287,365 — — — — — — — — — — — — — — — — — — —	Engineering &				
Environmental Control 287,365 287,365 — — — — — — — — — — — — — — — — — — —	Construction	534,462	534,462	_	_
Food	Entertainment	2,156,471	2,156,471	_	_
Forest Products & Paper	<b>Environmental Control</b>	287,365	287,365	_	_
Hand & Machine Tools 995,490 995,490 — — Healthcare Products 8,140,098 8,140,098 — — Healthcare Services 1,657,466 1,657,466 — — Home Builders 388,232 388,232 — — Hotels & Resorts 347,629 347,629 — — Household Products & Wares 626,677 — 626,677 — Insurance 973,587 973,587 — — Internet 2,976,856 2,976,856 — — Machinery - Diversified 1,912,990 1,912,990 — — Metal Fabricate/ Hardware 1,165,447 1,165,447 — — Miscellaneous Manufacturing 4,413,509 4,413,509 — —	Food	464,786	464,786	_	_
Healthcare Products         8,140,098         8,140,098         —           Healthcare Services         1,657,466         1,657,466         —           Home Builders         388,232         388,232         —           Hotels & Resorts         347,629         347,629         —           Household Products &         Wares         626,677         —         626,677         —           Insurance         973,587         973,587         —         —           Internet         2,976,856         2,976,856         —         —           Machinery - Diversified         1,912,990         1,912,990         —         —           Metal Fabricate/         Hardware         1,165,447         1,165,447         —         —           Miscellaneous         4,413,509         4,413,509         —         —         —	Forest Products & Paper	520,205	520,205	_	_
Healthcare Services       1,657,466       1,657,466       —         Home Builders       388,232       388,232       —         Hotels & Resorts       347,629       347,629       —         Household Products &       Wares       626,677       —       626,677       —         Insurance       973,587       973,587       —       —         Internet       2,976,856       2,976,856       —       —         Machinery - Diversified       1,912,990       1,912,990       —       —         Metal Fabricate/       Hardware       1,165,447       1,165,447       —       —         Miscellaneous       4,413,509       4,413,509       —       —       —	Hand & Machine Tools	995,490	995,490	_	_
Home Builders 388,232 388,232 — — Hotels & Resorts 347,629 347,629 — — Household Products & — 626,677 — 626,677 — Insurance 973,587 973,587 — — Internet 2,976,856 2,976,856 — — Machinery - Diversified 1,912,990 1,912,990 — — Metal Fabricate/ Hardware 1,165,447 1,165,447 — — Miscellaneous Manufacturing 4,413,509 4,413,509 — —	Healthcare Products	8,140,098	8,140,098	_	_
Hotels & Resorts 347,629 347,629 — — Household Products & 347,629 — 626,677 — 626,677 — Insurance 973,587 973,587 — — Internet 2,976,856 2,976,856 — — Machinery - Diversified 1,912,990 1,912,990 — — Metal Fabricate/ Hardware 1,165,447 1,165,447 — — Miscellaneous Manufacturing 4,413,509 4,413,509 — —	Healthcare Services	1,657,466	1,657,466	_	_
Household Products & Wares 626,677 — 626,677 — Insurance 973,587 973,587 — — Internet 2,976,856 2,976,856 — — Machinery - Diversified 1,912,990 1,912,990 — — Metal Fabricate/ Hardware 1,165,447 1,165,447 — — Miscellaneous Manufacturing 4,413,509 4,413,509 — —	Home Builders	388,232	388,232	_	_
Wares     626,677     —     626,677     —       Insurance     973,587     973,587     —     —       Internet     2,976,856     2,976,856     —     —       Machinery - Diversified     1,912,990     1,912,990     —     —       Metal Fabricate/       Hardware     1,165,447     1,165,447     —     —       Miscellaneous       Manufacturing     4,413,509     4,413,509     —     —	Hotels & Resorts	347,629	347,629	_	_
Insurance     973,587     973,587     —     —       Internet     2,976,856     2,976,856     —     —       Machinery - Diversified     1,912,990     1,912,990     —     —       Metal Fabricate/       Hardware     1,165,447     1,165,447     —     —       Miscellaneous       Manufacturing     4,413,509     4,413,509     —     —	Household Products &				
Internet       2,976,856       2,976,856       —       —         Machinery - Diversified       1,912,990       1,912,990       —       —         Metal Fabricate/       1,165,447       1,165,447       —       —         Miscellaneous       4,413,509       4,413,509       —       —	Wares	626,677	_	626,677	_
Machinery - Diversified       1,912,990       1,912,990       —       —         Metal Fabricate/       1,165,447       1,165,447       —       —         Miscellaneous       4,413,509       4,413,509       —       —	Insurance	973,587	973,587	_	_
Metal Fabricate/         Hardware       1,165,447       1,165,447       —       —         Miscellaneous       4,413,509       4,413,509       —       —	Internet	2,976,856	2,976,856	_	_
Hardware 1,165,447 1,165,447 — —  Miscellaneous  Manufacturing 4,413,509 4,413,509 — —	Machinery - Diversified	1,912,990	1,912,990	_	_
Miscellaneous  Manufacturing 4,413,509 4,413,509 — —	Metal Fabricate/				
Manufacturing 4,413,509 4,413,509 — —	Hardware	1,165,447	1,165,447	_	_
	Miscellaneous				
Oil & Gas 590.487 590.487 — —	Manufacturing	4,413,509	4,413,509	_	_
	Oil & Gas	590,487	590,487	_	_

ASSETS TABLE										
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input						
Pharmaceuticals Publishing /	\$ 6,135,760	\$ 6,135,760	\$ —	\$						
Newspapers	822,086	822,086	_	_						
Real Estate	417,780	417,780	_	_						
Retail	3,644,879	3,644,879	_	_						
Savings & Loans	356,285	356,285	_	_						
Semiconductors	2,324,621	2,324,621	_	_						
Software	13,274,458	13,274,458	_	_						
Telecommunications	2,199,044	2,199,044	_	_						
Transportation	1,263,022	1,263,022	_							
TOTAL COMMON STOCKS	88,091,896	87,465,219	626,677							
REAL ESTATE INVESTMENT TRUSTS SHORT-TERM	888,271	888,271	_	_						
INVESTMENTS	2,705,979	2,705,979								
TOTAL INVESTMENTS	\$91,686,146	\$91,059,469	\$626,677	\$—						

It Is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period.

An amount of \$1,011,200 was transferred from Level 1 into Level 2 at 12/31/18 as the Fund utilized third-party vendor modeling tools to reflect any significant market movements between the time at which the Fund valued its securities and the earlier closing of foreign markets.

The Fund did not have any transfers in and transfers out of Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

<sup>\*</sup> Non-income producing security.

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 84.0%					
Aerospace & Defense — 2.1%			Banks — (continued)		
AAR Corp.	10,043	\$ 375,006	Sandy Spring Bancorp, Inc.	17,158	\$ 537,732
Aerojet Rocketdyne Holdings, Inc.*	11,361	400,248	South State Corp.	20,293	1,216,565
Curtiss-Wright Corp.	10,106	1,032,025	Texas Capital Bancshares, Inc.*	5,886	300,716
Esterline Technologies Corp.*	8,378	1,017,508	The First of Long Island Corp.	17,734	353,793
Kaman Corp.	14,593	818,521	Towne Bank	25,797	617,838
Moog, Inc., Class A	10,769	834,382	TriCo Bancshares	17,930	605,855
		4,477,690	Union Bankshares Corp.	24,624	695,136
Airlines — 1.3%					34,939,733
SkyWest, Inc.	28,867	1,283,715	Biotechnology — 0.5%		
Spirit Airlines, Inc.*	25,865	1,498,101	Cambrex Corp.*	13,574	512,554
Spirit Airlines, mc.	23,003		Emergent BioSolutions, Inc.*	8,820	522,850
		2,781,816	Emergent biosolutions, me.	0,020	
Apparel — 0.6%					1,035,404
Columbia Sportswear Co.	7,934	667,170	Building Materials — 0.2%		
G-III Apparel Group Ltd.*	4,202	117,194	Universal Forest Products, Inc.	14,521	376,965
Wolverine World Wide, Inc.	18,730	597,300	Chemicals — 2.4%		
		1,381,664	H.B. Fuller Co.	25,981	1,108,609
			Ingevity Corp.*	11,987	1,003,192
Auto Manufacturers — 0.2%	44.036	264.224	Quaker Chemical Corp.	4 <b>,</b> 992	887,128
Navistar International Corp.*	14,036	364,234	Rogers Corp.*	4,683	463,898
Auto Parts & Equipment — 0.3%			Sensient Technologies Corp.	14,168	791,283
American Axle & Manufacturing Holdings,			Tronox Ltd., Class A	6,160	47,925
Inc.*	41,021	455,333	Univar, Inc.*	42,696	757,427
Standard Motor Products, Inc.	5,124	248,155	•	•	5,059,462
		703,488			2,022,102
Davilso 46.5%			Commercial Services — 4.3%		
Banks — 16.5%	26 240	E42 04E	Aaron's, Inc.	23,691	996,206
Amalgamated Bank, Class A Ameris Bancorp	26,310 23,610	513,045 747,729	ABM Industries, Inc.	22,819	732,718
·			Adtalem Global Education, Inc.*	34,465	1,630,884
BancorpSouth Bank Banner Corp.	31,392 33,359	820,587 1,784,039	AMN Healthcare Services, Inc.*	9,577	542,633
Boston Private Financial Holdings, Inc.	49,060	518,564	ASGN, Inc.*	13,858	755,261
Bryn Mawr Bank Corp.	13,587	467,393	Chegg, Inc.*	25,047	711,836
CenterState Bank Corp.	55,999	1,178,219	HMS Holdings Corp.*  James River Group Holdings Ltd.	16,046	451,374
Chemical Financial Corp.	36,500	1,336,265	Live Nation Entertainment, Inc.*	29,141 29,234	1,064,812 1,439,774
Columbia Banking System, Inc.	49,676	1,802,742	LiveRamp Holdings, Inc.*	17,255	666,561
Community Bank System, Inc.	25,747	1,501,050	Livertamp Holdings, Inc.	17,233	
ConnectOne Bancorp, Inc.	36,682	677,517			8,992,059
CVB Financial Corp.	85,446	1,728,573	Computers — 1.6%		
FB Financial Corp.	12,603	441,357	CACI International, Inc., Class A*	12,246	1,763,791
First Financial Bankshares, Inc.	24,565	1,417,155	Mercury Systems, Inc.*	4,458	210,819
First Merchants Corp.	39,250	1,345,097	NetScout Systems, Inc.*	58,225	1,375,857
First Midwest Bancorp, Inc.	49,068	972,037			3,350,467
Glacier Bancorp, Inc.	45,020	1,783,692			
Great Western Bancorp, Inc.	51,216	1,600,500	Cosmetics & Personal Care — 0.1%		
Guaranty Bancorp*	18,287	379,455	Edgewell Personal Care Co.*	5,464	204,080
Heritage Financial Corp.	25,153	747,547	Distribution & Wholesale — 0.8%		
Home BancShares, Inc.	41,318	675,136	Beacon Roofing Supply, Inc.*	37,467	1,188,453
Independent Bank Corp.	23,066	1,621,770	H&E Equipment Services, Inc.	27,107	553,525
Independent Bank Group, Inc.	19,241	880,661			1,741,978
Lakeland Financial Corp.	25,898	1,040,064			1,7 11,570
LegacyTexas Financial Group, Inc.	47,441	1,522,382	Diversified Financial Services — 1.5%		
National Commerce Corp.*	13,199	475,164	BrightSphere Investment Group PLC	61,432	656,094
Old Line Bancshares, Inc.	8,714	229,352	Houlihan Lokey, Inc.	20,217	743,986
Pinnacle Financial Partners, Inc.	24,898	1,147,798	Stifel Financial Corp.	31,374	1,299,511
Renasant Corp.	41,657	1,257,208			

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Diversified Financial Services — (continued)			Healthcare Services — (continued)		
Virtu Financial, Inc., Class A	18,783	\$ 483,850	Syneos Health, Inc.*	30,918	\$ 1,216,623
		3,183,441			1,629,526
Electric — 4.6%			Home Builders — 0.9%		
ALLETE, Inc.	33,074	2,520,900	Foundation Building Materials, Inc.*	38,509	320,010
El Paso Electric Co.	22,728	1,139,355	KB Home	17,550	335,205
IDACORP, Inc.	25,269	2,351,533	Meritage Homes Corp.*	20,368	747,913
PNM Resources, Inc.	40,101	1,647,750	Taylor Morrison Home Corp., Class A*	26,342	418,838
Portland General Electric Co.	45,718	2,096,171			1,821,966
		9,755,709	Household Products & Wares — 0.8%		
Electronics — 1.1%			Central Garden & Pet Co., Class A*	28,295	884,219
Brady Corp., Class A	18,579	807,443	Helen of Troy Ltd.*	5,958	781,570
II-VI, Inc.*	18,281	593,401			1,665,789
Watts Water Technologies, Inc., Class A	13,258	<u>855,539</u>	Insurance — 5.6%		
		2,256,383	AMERISAFE, Inc.	12,145	688,500
Engineering & Construction — 1.5%			CNO Financial Group, Inc.	69,652	1,036,422
EMCOR Group, Inc.	14,555	868,788	Enstar Group Ltd.*	5,440	911,581
Granite Construction, Inc.	13,740	553,447	Kemper Corp.	16,211	1,076,086
KBR, Inc.	72,143	1,095,131	Kinsale Capital Group, Inc.	22,987	1,277,158
TopBuild Corp.*	12,443	559,935	MGIC Investment Corp.*	166,325	1,739,760
		3,077,301	Primerica, Inc.	10,123	989,118
Entertainment — 0.6%			ProAssurance Corp. RLI Corp.	20,904 17,153	847,866 1,183,385
Eldorado Resorts, Inc.*	36,022	1,304,356	Selective Insurance Group, Inc.	33,512	2,042,221
Marriott Vacations Worldwide Corp.	872	61,485	Selective insurance di sup, inci	33,3 .2	11,792,097
		1,365,841			11,792,097
Environmental Control — 0.6%			Internet — 0.5%		
Advanced Disposal Services, Inc.*	36,344	870,075	Cars.com, Inc.*	41,637	895,195
U.S. Ecology, Inc.	7,847	494,204	Liberty Expedia Holdings, Inc., Class A*	2,963	115,883
	.,	1,364,279			1,011,078
		1,50 1,275	Iron & Steel — 1.3%		
Food — 2.4%	22.404	020 642	Allegheny Technologies, Inc.*	69,423	1,511,339
B&G Foods, Inc. Darling Ingredients, Inc.*	32,191 65,809	930,642 1,266,165	Carpenter Technology Corp.	5,869	208,995
Hostess Brands, Inc.*	12,549	137,286	Cleveland-Cliffs, Inc.* Commercial Metals Co.	42,725	328,555
Nomad Foods Ltd.*	36,721	613,975	Commercial Metals Co.	40,316	645,862
Performance Food Group Co.*	20,177	651,112			2,694,751
Sanderson Farms, Inc.	2,618	259,941	Leisure Time — 0.0%		
SpartanNash Co.	3,901	67,019	Callaway Golf Co.	1,975	30,218
The Simply Good Foods Co.*	62,832	1,187,525	Lodging — 0.2%		
		5,113,665	Belmond Ltd., Class A*	11,965	299,484
Gas — 2.0%			Boyd Gaming Corp.	2,911	60,491
Chesapeake Utilities Corp.	15,098	1,227,468			359,975
New Jersey Resources Corp.	37,621	1,718,151	Machinery - Diversified — 0.7%		
South Jersey Industries, Inc.	50,284	1,397,895	Cactus, Inc., Class A*	37,161	1,018,583
		4,343,514	Tennant Co.	7,101	370,033
Healthcare Products — 1.9%				.,	1,388,616
Avanos Medical, Inc.*	29,738	1,331,965			1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
CONMED Corp.	17,479	1,122,152	Media — 1.0%	22.64=	E22.0E=
Orthofix Medical, Inc.*	13,669	717,486	MSG Networks, Inc., Class A* Nexstar Media Group, Inc., Class A	22,617	532,857
Wright Medical Group N.V.*	29,836	812,136	Sinclair Broadcast Group, Inc., Class A	8,347 3,833	656,408 100,961
		3,983,739	TEGNA, Inc.	80,407	874,024
Healthcare Services — 0.8%			, -	,	2,164,250
Acadia Healthcare Co., Inc.*	16,060	412,903			۷,۱۵۹,۷
	. 5,000	1.2,707			

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Metal Fabricate/Hardware — 2.0%			Retail — (continued)		
CIRCOR International, Inc.*	20,742	\$ 441,805	The Wendy's Co.	33,708	\$ 526,182
RBC Bearings, Inc.*	6,754	885,449	,	,	6,900,259
Rexnord Corp.*	71,878	1,649,600			0,900,299
TriMas Corp.*	46,420	1,266,802	Savings & Loans — 2.3%		
		4,243,656	Brookline Bancorp, Inc.	53,275	736,261
			Flushing Financial Corp.	26,074	561,373
Mining — 0.4%			OceanFirst Financial Corp.	49,746	1,119,782
Constellium N.V., Class A*	68,027	475,509	Pacific Premier Bancorp, Inc.*	10,259	261,810
Royal Gold, Inc.	5,360	459,084	Provident Financial Services, Inc.	41,817	1,009,044
		934,593	Washington Federal, Inc.	45,826	1,224,013
Miscellaneous Manufacturing — 0.9%					4,912,283
Federal Signal Corp.	41,793	831,681	Semiconductors — 3.1%		
ITT, Inc.	18,871	910,903	Cree, Inc.*	41,116	1,758,737
Movado Group, Inc.	3,787	119,745	CTS Corp.	31,437	813,904
• •		1,862,329	Entegris, Inc.	40,753	1,136,805
		1,002,525	Lattice Semiconductor Corp.*	130,714	904,541
Oil & Gas — 3.4%			Semtech Corp.*	19,637	900,749
Callon Petroleum Co.*	164,648	1,068,566	Silicon Laboratories, Inc.*	5,561	438,262
Centennial Resource Development, Inc.,			Synaptics, Inc.*	14,217	529,015
Class A*	46,876	516,574			6,482,013
Delek US Holdings, Inc.	19,133	622,014	_		
Falcon Minerals Corp.*	70,927	602,880	Software — 3.4%		
Matador Resources Co.*	21,482	333,615	Allscripts Healthcare Solutions, Inc.*	148,109	1,427,771
PBF Energy, Inc., Class A	10,235	334,377	CommVault Systems, Inc.*	25,657	1,516,072
PDC Energy, Inc.*	25,725	765,576	Cornerstone OnDemand, Inc.*	27,841	1,404,021
SM Energy Co.	25,240	390,715	SYNNEX Corp.	14,837	1,199,423
Viper Energy Partners LP	43,604	1,135,448	Verint Systems, Inc.*	37,415	1,583,029
WPX Energy, Inc.*	131,554	1,493,138			7,130,316
		7,262,903	Storage & Warehousing — 0.3%		
Oil & Gas Services — 0.7%			Mobile Mini, Inc.	17,887	567,912
Apergy Corp.*	47,165	1,277,228	- 1		
NCS Multistage Holdings, Inc.*	22,072	112,347	Telecommunications — 2.5%	50.473	4.072.642
		1,389,575	Ciena Corp.*	58,172	1,972,612
		1,505,575	Knowles Corp.*	37,474 43.713	498,779
Pharmaceuticals — 0.2%			Liberty Latin America Ltd., Class C* Plantronics, Inc.	43,712 11,421	636,884 378,035
Mallinckrodt PLC*	32,329	510,798	Viavi Solutions, Inc.*	180,053	1,809,533
Real Estate — 0.5%			viavi Solutions, inc.	100,055	
Kennedy-Wilson Holdings, Inc.	64,384	1,169,857			5,295,843
D-4-11 2.2%			Transportation — 2.1%		
Retail — 3.3%	0 271	FF9 077	Air Transport Services Group, Inc.*	60,236	1,373,983
Asbury Automotive Group, Inc.* Ascena Retail Group, Inc.*	8,372 14,592	558,077	Atlas Air Worldwide Holdings, Inc.*	2,599	109,652
At Home Group, Inc.*	12,522	36,626 233,661	Echo Global Logistics, Inc.*	17,552	356,832
Bed Bath & Beyond, Inc.	7,044	233,661 79,738	Golar LNG Ltd.	66,879	1,455,287
Big Lots, Inc.	9,705	280,669	Saia, Inc.*	13,294	742,071
Brinker International, Inc.	4,766	209,609	XPO Logistics, Inc.*	7,875	449,190
Burlington Stores, Inc.*	11,163	1,815,885			4,487,015
Caleres, Inc.	6,033	167,898	TOTAL COMMONISTORYS		
Dine Brands Global, Inc.	11,886	800,403	TOTAL COMMON STOCKS		177 560 520
DSW, Inc., Class A	10,987	271,379	(Cost \$175,620,670)		177,560,530
GameStop Corp., Class A	9,161	115,612	DEAL ESTATE INIVESTMENT TRUSTS 42.6	0/	
Guess?, Inc.	13,031	270,654	REAL ESTATE INVESTMENT TRUSTS — 12.6	/0	
Hudson Ltd., Class A*	24,187	414,807	Apartments — 0.2%		
Jack in the Box, Inc.	7,641	593,171	Preferred Apartment Communities, Inc.,		
Signet Jewelers Ltd.	3,350	106,429	Class A	34,116	479,671
The Children's Place, Inc.	4,656	419,459			

	Number of Shares	Value†
REAL ESTATE INVESTMENT TRUSTS — (con	tinued)	
Building & Real Estate — 1.1%		
MFA Financial, Inc.	212,569	\$ 1,419,961
PennyMac Mortgage Investment Trust	43,283	805,929
		2,225,890
Diversified — 1.3%		
Blackstone Mortgage Trust, Inc.,		
Class A	22,542	718,188
PS Business Parks, Inc.	15,180	1,988,580
•	,	2,706,768
		2,700,700
Diversified Financial Services — 0.4%		
Granite Point Mortgage Trust, Inc.	42,010	757,440
Healthcare — 2.0%		
Healthcare Realty Trust, Inc.	72,642	2,065,939
National Health Investors, Inc.	28,619	2,161,879
		4,227,818
Hotels & Resorts — 3.1%		
Chatham Lodging Trust	26,324	465,408
Chesapeake Lodging Trust	92,574	2,254,177
Pebblebrook Hotel Trust	78,265	2,215,682
RLJ Lodging Trust	103,404	1,695,826
	,	6,631,093
		0,051,055
Industrial — 0.9%		
CyrusOne, Inc.	37,262	1,970,415
Office Property — 1.4%		
Columbia Property Trust, Inc.	105,278	2,037,129
Hudson Pacific Properties, Inc.	34,091	990,685
		3,027,814
Real Estate Investment Trusts — 0.6%		
Two Harbors Investment Corp.	98,739	1,267,809
·	50,755	1,207,009
Storage & Warehousing — 0.6%		
Life Storage, Inc.	14,131	1,314,042
Strip Centers — 1.0%		
Acadia Realty Trust	83,715	1,989,068
TOTAL REAL ESTATE INVESTMENT TRUSTS		
(Cost \$27,332,636)		26,597,828
EXCHANGE TRADED FUNDS — 0.5%		
iShares Russell 2000 Value ETF		
(Cost \$1,162,446)	8,995	967,322
SHORT-TERM INVESTMENTS — 1.5%		
BlackRock Liquidity Funds FedFund		
Portfolio—Institutional Shares		
(Cost \$3,165,620)	3,165,620	3,165,620
•	, , ,	
TOTAL INVESTMENTS — 98.6%		208 204 200
(Cost \$207,281,372)		208,291,300
Other Assets & Liabilities — 1.4%		2,993,899
TOTAL NET ASSETS — 100.0%		\$211,285,199

† See Security Valuation Note.

\* Non-income producing security.

ETF — Exchange-Traded Fund.

LP — Limited Partnership.

PLC — Public Limited Company.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

	,	ASSETS TABLE		
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON				
STOCKS	\$177,560,530	\$177,560,530	\$—	\$
REAL ESTATE				
INVESTMENT				
TRUSTS	26,597,828	26,597,828	_	_
EXCHANGE				
TRADED				
FUNDS	967,322	967,322	_	_
SHORT-TERM				
INVESTMENTS	3,165,620	3,165,620		
TOTAL				
INVESTMENTS	\$208,291,300	\$208,291,300	\$	\$

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

 $\label{thm:companying} The \ accompanying \ notes \ are \ an \ integral \ part \ of \ these \ financial \ statements.$ 

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — 88.1%							
Advertising — 0.1%			_	Auto Manufacturers — (continued)			_
Adesto Technologies Corp.*	1,000	\$	4,400	REV Group, Inc.	1,000	\$	7,510
Clear Channel Outdoor Holdings, Inc., Class A	600		3,114	Wabash National Corp.	2,300		30,084
MDC Partners, Inc., Class A*	1,800		4,698				91,434
Telaria, Inc.*	2,300		6,279	Auto Parts & Equipment — 1.0%			
Yext, Inc.*	3,100	_	46,035	Altra Industrial Motion Corp.	2,303		57,920
		_	64,526	American Axle & Manufacturing Holdings,	2,505		37,320
Aerospace & Defense — 0.9%				Inc.*	4,216		46,798
AAR Corp.	1,269		47,385	Commercial Vehicle Group, Inc.*	1,000		5,700
Aerojet Rocketdyne Holdings, Inc.*	2,740		96,530	Cooper Tire & Rubber Co.	2,049		66,244
Aerovironment, Inc.*	718		48,788	Cooper-Standard Holdings, Inc.*	700		43,484
Astronics Corp.*	895		27,253	Dana, Inc.	5,496		74,910
Cubic Corp.	969		52,074	Dorman Products, Inc.*	992		89,300
Ducommun, Inc.*	400		14,528	Douglas Dynamics, Inc.	900		32,301
Esterline Technologies Corp.*	940		114,163	Gentherm, Inc.*	1,468		58,691
Kaman Corp.	1,048		58,782	Meritor, Inc.*	3,045		51,491
Kratos Defense & Security Solutions, Inc.*	3,222		45,398	Miller Industries, Inc.	443		11,961
Moog, Inc., Class A National Presto Industries, Inc.	1,191 146		92,279 17,070	Modine Manufacturing Co.*  Motorcar Parts of America, Inc.*	2,077 700		22,452 11,648
Triumph Group, Inc.	2,000		23,000	Spartan Motors, Inc.	1,500		10,845
mampir Group, inc.	2,000	_		Standard Motor Products, Inc.	900		43,587
		_	637,250	Superior Industries International, Inc.	1,119		5,382
Agriculture — 0.3%				Tenneco, Inc., Class A	1,900		52,041
22nd Century Group, Inc.*	3,700		9,213	Titan International, Inc.	1,913		8,915
Alico, Inc.	151		4,455	Tower International, Inc.	800		19,040
Cadiz, Inc.*	800		8,240	,		_	712,710
Limoneira Co.	600		11,730			_	7 12,7 10
Tejon Ranch Co.*	825		13,679	Banks — 9.0%			
The Andersons, Inc.	1,132		33,835	1st Constitution Bancorp	400		7,972
Turning Point Brands, Inc.	300		8,166	1st Source Corp.	688		27,754
Universal Corp.	955		51,713	Access National Corp.	399		8,511
Vector Group Ltd.	3,988	_	38,803	ACNB Corp.	300		11,775
		_	179,834	Allegiance Bancshares, Inc.* American National Bankshares, Inc.	500 400		16,185
Airlines — 0.5%				Ameris Bancorp	1,447		11,724 45,826
Allegiant Travel Co.	501		50,210	Ames National Corp.	299		7,601
Hawaiian Holdings, Inc.	2,026		53,507	Arrow Financial Corp.	412		13,192
SkyWest, Inc.	1,981		88,095	Atlantic Capital Bancshares, Inc.*	800		13,096
Spirit Airlines, Inc.*	2,600		150,592	BancFirst Corp.	620		30,938
			342,404	Banco Latinoamericano de Comercio Exterior			
A		_		S.A.	1,110		19,203
Apparel — 0.8%	2.600		(7.540	BancorpSouth Bank	3,649		95,385
Crocs, Inc.* Deckers Outdoor Corp.*	2,600		67,548	Bank of Commerce Holdings	900		9,864
G-III Apparel Group Ltd.*	1,100 1,708		140,745	Bank of Marin Bancorp	580		23,919
Oxford Industries, Inc.	608		47,636 43,192	Bankwell Financial Group, Inc.	300		8,613
Rocky Brands, Inc.	400		10,400	Banner Corp.	1,200		64,176
Steven Madden Ltd.	3,373		102,067	Bar Harbor Bankshares	597		13,391
Superior Group of Cos., Inc.	500		8,825	Baycom Corp.*	400		9,236
Unifi, Inc.*	660		15,075	BCB Bancorp, Inc.	700		7,329
Weyco Group, Inc.	200		5,834	Blue Hills Bancorp, Inc.	1,100		23,474
Wolverine World Wide, Inc.	3,582		114,230	Boston Private Financial Holdings, Inc. Bridge Bancorp, Inc.	3 <b>,</b> 358 707		35,494 18,021
			555,552	Bryn Mawr Bank Corp.	732		25,181
		_	<del>-</del>	Business First Bancshares, Inc.	400		9,692
Auto Manufacturers — 0.1%				Byline Bancorp, Inc.*	600		9,996
Blue Bird Corp.*	392		7,130	C&F Financial Corp.	200		10,642
Navistar International Corp.*	1,800		46,710	Cadence BanCorp	2,700		45,306

	Number of Shares		alue†		Number of Shares		Value†
COMMON STOCKS — (continued)			<u> </u>				<u> </u>
Banks — (continued)				Banks — (continued)			
Cambridge Bancorp	100	\$	8,325	First Mid-Illinois Bancshares, Inc.	500	\$	15,960
Camden National Corp.	539		19,388	First Midwest Bancorp, Inc.	4,014	т	79,517
Capital City Bank Group, Inc.	269		6,243	First Northwest Bancorp	500		7,415
Capstar Financial Holdings, Inc.	500		7,365	First United Corp.	400		6,368
Carolina Financial Corp.	800		23,672	Franklin Financial Network, Inc.*	400		10,548
Cass Information Systems, Inc.	598		31,646	Fulton Financial Corp.	6,403		99,118
Cathay General Bancorp	2,950		98,913	German American Bancorp, Inc.	738		20,494
CB Financial Services, Inc.	300		7,434	Glacier Bancorp, Inc.	3,221		127,616
CBTX, Inc.	700		20,580	Great Southern Bancorp, Inc.	471		21,680
CenterState Bank Corp.	3,715		78,164	Great Western Bancorp, Inc.	2,300		71,875
Central Pacific Financial Corp.	1,100		26,785	Green Bancorp, Inc.	700		11,998
Central Valley Community Bancorp	400		7,548	Guaranty Bancorp*	1,000		20,750
Century Bancorp, Inc., Class A	69		4,673	Guaranty Bancshares, Inc.	300		8,946
Chemical Financial Corp.	2,700		98,847	Hancock Whitney Corp.	3,272		113,375
Chemung Financial Corp.	200		8,262	Hanmi Financial Corp.	1,213		23,896
Citizens & Northern Corp.	356		9,409	HarborOne Bancorp, Inc.*	600		9,534
City Holding Co.	548		37,039	Heartland Financial USA, Inc.	1,117		49,092
Civista Bancshares, Inc.	400		6,968	Heritage Commerce Corp.	1,200		13,608
CNB Financial Corp.	474		10,878	Heritage Financial Corp.	1,130		33,584
Codorus Valley Bancorp, Inc.	463		9,839	Home BancShares, Inc.	6,235		101,880
Columbia Banking System, Inc.	2,768	1	00,451	Hope Bancorp, Inc.	5,067		60,095
Community Bank System, Inc.	1,837	1	07,097	Horizon Bancorp, Inc.	1,350		21,303
Community Trust Bancorp, Inc.	483		19,132	Howard Bancorp, Inc.*	500		7,150
ConnectOne Bancorp, Inc.	1,060		19,578	IBERIABANK Corp.	2,146		137,945
County Bancorp, Inc.	300		5,211	Independent Bank Corp.	800		16,816
Customers Bancorp, Inc.*	980		17,836	Independent Bank Corp., Rockland MA	1,071		75,302
CVB Financial Corp.	3,992		80,758	Independent Bank Group, Inc.	800		36,616
Eagle Bancorp, Inc.*	1,173		57,137	International Bancshares Corp.	2,125		73,100
Enterprise Bancorp, Inc.	313		10,066	Investar Holding Corp.	300		7,440
Enterprise Financial Services Corp.	782		29,427	Kearny Financial Corp.	3,945		50,575
Equity Bancshares, Inc., Class A*	500		17,625	Lakeland Bancorp, Inc.	1,711		25,340
Esquire Financial Holdings, Inc.*	300		6,510	Lakeland Financial Corp.	891		35,783
Evans Bancorp, Inc.	200		6,502	LCNB Corp.	400		6,060
Farmers & Merchants Bancorp, Inc.	400		15,396	LegacyTexas Financial Group, Inc.	1,866		59,880
Farmers National Banc Corp.	1,100		14,014	Live Oak Bancshares, Inc.	900		13,329
FB Financial Corp.	500		17,510	Luther Burbank Corp.	800		7,216
Fidelity D&D Bancorp, Inc.	100		6,418	Macatawa Bank Corp.	1,300		12,506
Fidelity Southern Corp.	907		23,600	MB Financial, Inc.	3,084		122,219
Financial Institutions, Inc.	440		11,308	MBT Financial Corp.	900		8,370
First Bancorp	1,124		36,710	Mercantile Bank Corp.	700		19,782
First BanCorp Puerto Rico	8,200		70,520	Merchants Bancorp	600		11,976
First Bancorp, Inc.	434		11,414	Metropolitan Bank Holding Corp.*	200		6,170
First Bank/Hamilton NJ	800		9,696	Mid Penn Bancorp, Inc.	300		6,906
First Busey Corp.	1,713		42,037	Middlefield Banc Corp.	200		8,486
First Business Financial Services, Inc.	400		7,804	Midland States Bancorp, Inc.	900		20,106
First Choice Bancorp	300		6,780	MidSouth Bancorp, Inc.	700		7,420
First Commonwealth Financial Corp.	3,721		44,950	MidWestOne Financial Group, Inc.	400		9,932
First Community Bankshares, Inc.	626		19,706	MVB Financial Corp.	500		9,020
First Community Corp.	400		7,772	National Gammarsa Corn *	319		11,621
First Financial Bankshares, Inc.	3,782		89,709	National Commerce Corp.*	600 1 660		21,600
First Financial Bankshares, Inc.	2,452		41,456	NBT Bancorp, Inc.	1,669		57,731
First Financial Corp. First Foundation, Inc.*	480 1,200		19,272 15,432	Nicolet Bankshares, Inc.* Northeast Bancorp	300 300		14,640
First Internet Bancorp	300		6,132	Northeast Bancorp Northrim BanCorp, Inc.	300		5,019 9,861
First Interstate BancSystem, Inc., Class A	1,287		47,053	Norwood Financial Corp.	300		9,900
First Merchants Corp.	1,938		66,415	OFG Bancorp	1,810		29,793
instructed and corp.	1,900		00,117	of a paricorp	1,010		20,100

	Number of Shares	Value†		Number of Shares	: Value <del>†</del>
COMMON STOCKS — (continued)					1
Banks — (continued)			Banks — (continued)		
Ohio Valley Banc Corp.	200	\$ 7,078	Union Bankshares Corp.	2,508	\$ 70,801
Old Line Bancshares, Inc.	700	18,424	Union Bankshares, Inc., Morrisville VT	100	4,775
Old National Bancorp	5,761	88,719	United Bankshares, Inc.	3,856	119,960
Old Second Bancorp, Inc.	800	10,400	United Community Banks, Inc.	2,978	63,908
OP Bancorp*	700	6,209	Unity Bancorp, Inc.	400	8,304
Opus Bank	700	13,713	Univest Corp.	1,087	23,447
Origin Bancorp, Inc.	600	20,448	Valley National Bancorp	12,335	109,535
Orrstown Financial Services, Inc.	400	7,284	Veritex Holdings, Inc.*	900	19,242
Pacific Mercantile Bancorp*	800	5,720	Walker & Dunlop, Inc.	1,100	47,575
Park National Corp.	524	44,514	Washington Trust Bancorp, Inc.	570	27,092
Parke Bancorp, Inc.	400	7,486	WesBanco, Inc.	1,938	71,105
PCSB Financial Corp.	700	13,692	West Bancorporation, Inc.	778	14,852
Peapack Gladstone Financial Corp.	636	16,014	Westamerica Bancorporation	973	54,177
Penns Woods Bancorp, Inc.	268	10,784	Western New England Bancorp, Inc.	1,000	10,040
People's Utah Bancorp	600	18,090			6,388,770
Peoples Bancorp, Inc.	572	17,217			
Peoples Financial Services Corp.	300	13,218	Beverages — 0.3%		
Preferred Bank	500	21,675	Coca-Cola Bottling Co. Consolidated	174	30,864
Premier Financial Bancorp, Inc.	550	8,200	Craft Brew Alliance, Inc.*	700	10,017
QCR Holdings, Inc.	400	12,836	Farmer Brothers Co.*	204	4,759
RBB Bancorp	600	10,542	MGP Ingredients, Inc.	500	28,525
Reliant Bancorp, Inc.	400	9,216	National Beverage Corp.	442	31,722
Renasant Corp.	1,835	55,380	Primo Water Corp.*	1,000	14,010
Republic Bancorp, Inc., Class A	387	14,985	The Boston Beer Co., Inc., Class A*	327	78,755
Republic First Bancorp, Inc.*	1,700	10,149			198,652
S&T Bancorp, Inc.	1,259	47,641	Biotechnology — 4.2%		
Sandy Spring Bancorp, Inc.	1,350	42,309	Abeona Therapeutics, Inc.*	900	6,426
SB One Bancorp	400	8,176	ACADIA Pharmaceuticals, Inc.*	3,800	61,446
Seacoast Banking Corp of Florida*	1,840	47,877	Acceleron Pharma, Inc.*	1,400	60,970
ServisFirst Bancshares, Inc.	1,800	57,366	Achillion Pharmaceuticals, Inc.*	4,300	6,837
Shore Bancshares, Inc.	600	8,724	Acorda Therapeutics, Inc.*	1,731	26,969
Sierra Bancorp	612	14,706	Aduro Biotech, Inc.*	2,800	7,392
Simmons First National Corp., Class A	3,496	84,358	Adverum Biotechnologies, Inc.*	2,100	6,615
SmartFinancial, Inc.*	400	7,308	Agenus, Inc.*	3,200	7,616
South State Corp.	1,380	82,731	AgeX Therapeutics, Inc.*	310	927
Southern First Bancshares, Inc.*	300	9,621	Albireo Pharma, Inc.*	300	7,359
Southern National Bancorp of Virginia, Inc.	600	7,932	Alder Biopharmaceuticals, Inc.*	2,400	24,600
Southside Bancshares, Inc.	1,271	40,354	Allakos, Inc.*	300	15,681
State Bank Financial Corp.	1,500	32,385	Allogene Therapeutics, Inc.*	800	21,544
Sterling Bancorp, Inc.	700	4,865	AMAG Pharmaceuticals, Inc.*	1,456	22,117
Stock Yards Bancorp, Inc.	767	25,158	AnaptysBio, Inc.*	700	44,653
Summit Financial Group, Inc.	400	7,724	ANI Pharmaceuticals, Inc.*	300	13,506
The Bancorp, Inc.*	1,512	12,035	Aptinyx, Inc.*	500	8,270
The Bank of NT Butterfield & Son Ltd.	2,100	65,835	Arbutus Biopharma Corp.*	1,300	4,979
The Bank of Princeton	300	8,370	Arcus Biosciences, Inc.*	1,200	12,924
The Community Financial Corp.	100	2,924	Ardelyx, Inc.*	1,400	2,506
The First Bancshares, Inc.	500	15,125	Arena Pharmaceuticals, Inc.*	1,850	72,058
The First of Long Island Corp.	889	17,736	ArQule, Inc.*	3,300	9,141
Tompkins Financial Corp.	558	41,856	Arrowhead Pharmaceuticals, Inc.*	3,300	40,986
Towne Bank	2,577	61,719	Assembly Biosciences, Inc.*	700	15,834
TriCo Bancshares	1,098	37,101	Atara Biotherapeutics, Inc.*	1,600	55,584
TriState Capital Holdings, Inc.*	1,000	19,460	Athersys, Inc.*	3,600	5,184
Triumph Bancorp, Inc.*	900	26,730	Audentes Therapeutics, Inc.*	1,200	25,584
TrustCo Bank Corp.	3,252	22,309	AVEO Pharmaceuticals, Inc.*	3,900	6,240
Trustmark Corp.	2,630	74,771	Avid Bioservices, Inc.*	2,700	11,070
UMB Financial Corp.	1,781	108,588	Bellicum Pharmaceuticals, Inc.*	900	2,628

	Number of Shares	Value†		Number of Shares		Value†
COMMON STOCKS — (continued)						
Biotechnology — (continued)			Biotechnology — (continued)			
BioCryst Pharmaceuticals, Inc.*	4,100	\$ 33,087	NeoGenomics, Inc.*	2,400	\$	30,264
Biohaven Pharmaceutical Holding Co., Ltd.*	1,200	44,376	NewLink Genetics Corp.*	700		1,064
BioTime, Inc.*	3,100	2,830	Novavax, Inc.*	16,229		29,861
Blueprint Medicines Corp.*	1,600	86,256	Omeros Corp.*	1,900		21,166
Calyxt, Inc.*	300	3,108	Organovo Holdings, Inc.*	4,900		4,690
Cambrex Corp.*	1,267	47,842	Pacific Biosciences of California, Inc.*	4,600		34,040
CASI Pharmaceuticals, Inc.*	1,600	6,432	Palatin Technologies, Inc.*	10,300		7,297
Cellular Biomedicine Group, Inc.*	600	10,596	Paratek Pharmaceuticals, Inc.*	900		4,617
Clearside Biomedical, Inc.*	1,300	1,391	PDL BioPharma, Inc.*	6,217		18,029
Cohbar, Inc.*	1,100	3,421	Pieris Pharmaceuticals, Inc.*	1,300		3,458
Coherus Biosciences, Inc.*	1,900	17,195	PolarityTE, Inc.*	300		4,047
Corvus Pharmaceuticals, Inc.*	700	2,569	Prothena Corp. PLC*	1,400		14,420
Crinetics Pharmaceuticals, Inc.*	300	8,997	PTC Therapeutics, Inc.*	1,800		61,776
Cue Biopharma, Inc.*	700	3,290	Puma Biotechnology, Inc.*	1,100		22,385
Cymabay Therapeutics, Inc.*	2,300	18,101	REGENXBIO, Inc.*	1,100		46,145
Cytokinetics, Inc.*	1,400	8,848	Repligen Corp.*	1,500		79,110
CytomX Therapeutics, Inc.*	1,500	22,650	Retrophin, Inc.*	1,500		33,945
Deciphera Pharmaceuticals, Inc.*	300	6,297	Rigel Pharmaceuticals, Inc.*	6,090		14,007
Denali Therapeutics, Inc.*	1,700	35,122	RTI Surgical, Inc.*	2,035		7,530
Dermira, Inc.*	1,500	10,785	Rubius Therapeutics, Inc.*	500		8,040
Dicerna Pharmaceuticals, Inc.*	1,700	18,173	Sangamo Therapeutics, Inc.*	3,903		44,806
Dynavax Technologies Corp.*	2,320	21,228	Savara, Inc.*	1,000 300		7,570 798
Editas Medicine, Inc.*	1,700 800	38,675	Selecta Biosciences, Inc.*			
Eloxx Pharmaceuticals, Inc.* Emergent BioSolutions, Inc.*	1,658	9,608	Senseonics Holdings, Inc.*	2,500 600		6,475 1,392
Enzo Biochem, Inc.*	1,800	98,286 5,004	Sienna Biopharmaceuticals, Inc.* Solid Biosciences, Inc.*	400		10,720
Epizyme, Inc.*	2,200	13,552	Spark Therapeutics, Inc.*	1,200		46,968
Fate Therapeutics, Inc.*	2,200	25,660	Spectrum Pharmaceuticals, Inc.*	3,814		33,373
Five Prime Therapeutics, Inc.*	1,100	10,230	Stemline Therapeutics, Inc.*	1,000		9,500
Fortress Biotech, Inc.*	500	430	The Medicines Co.*	2,592		49,611
Geron Corp.*	6,550	6,550	Theravance Biopharma, Inc.*	1,500		38,385
GlycoMimetics, Inc.*	1,300	12,311	Tocagen, Inc.*	1,000		8,210
Guardant Health, Inc.*	500	18,795	Ultragenyx Pharmaceutical, Inc.*	1,800		78,264
Halozyme Therapeutics, Inc.*	4,489	65,674	UNITY Biotechnology, Inc.*	900		14,634
Harvard Bioscience, Inc.*	1,900	6,042	Veracyte, Inc.*	800		10,064
Helius Medical Technologies, Inc.*	800	7,328	Verastem, Inc.*	2,000		6,720
Homology Medicines, Inc.*	500	11,180	Vericel Corp.*	1,400		24,360
Idera Pharmaceuticals, Inc.*	712	1,972	Viking Therapeutics, Inc.*	1,700		13,005
ImmunoGen, Inc.*	4,863	23,342	WaVe Life Sciences Ltd.*	700		29,428
Immunomedics, Inc.*	5,036	71,864	ZIOPHARM Oncology, Inc.*	4,627		8,652
Innovate Biopharmaceuticals, Inc.*	500	1,155	<i>577</i>	ŕ	_	2,974,932
Innoviva, Inc.*	2,800	48,860			_	2,7/4,772
Inovio Pharmaceuticals, Inc.*	2,500	10,000	Building Materials — 1.4%			
Insmed, Inc.*	2,800	36,736	AAON, Inc.	1,585		55,570
Intellia Therapeutics, Inc.*	1,300	17,745	Apogee Enterprises, Inc.	1,043		31,133
Intercept Pharmaceuticals, Inc.*	800	80,632	Armstrong Flooring, Inc.*	1,000		11,840
Intrexon Corp.*	2,700	17,658	Boise Cascade Co.	1,400		33,390
Iovance Biotherapeutics, Inc.*	3,100	27,435	Builders FirstSource, Inc.*	4,173		45,527
Karyopharm Therapeutics, Inc.*	1,900	17,803	Caesarstone Ltd.	1,000		13,580
Kura Oncology, Inc.*	700	9,828	Comfort Systems USA, Inc.	1,327		57,963
Lexicon Pharmaceuticals, Inc.*	1,760	11,686	Continental Building Products, Inc.*	1,500		38,175
Ligand Pharmaceuticals, Inc.*	744	100,961	Forterra, Inc.*	900		3,384
Loxo Oncology, Inc.*	1,000	140,070	Gibraltar Industries, Inc.*	1,201		42,744
MacroGenics, Inc.*	1,300	16,510	Griffon Corp.	1,256		13,125
Momenta Pharmaceuticals, Inc.*	2,682	29,609	JELD-WEN Holding, Inc.*	2,600		36,946
Myriad Genetics, Inc.*	2,500	72,675	Louisiana-Pacific Corp.  Masonite International Corp.*	5,594 1,100		124,299 49,313

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Building Materials — (continued)			Commercial Services — (continued)		
NCI Building Systems, Inc.*	1,664	\$ 12,064	AMN Healthcare Services, Inc.*	1,809	\$ 102,498
Patrick Industries, Inc.*	975	28,870	ASGN, Inc.*	1,952	106,384
PGT Innovations, Inc.*	1,700	26,945	Avalara, Inc.*	300	9,345
Quanex Building Products Corp.	1,425	19,366	Avis Budget Group, Inc.*	2,700	60,696
Simpson Manufacturing Co., Inc.	1,585	85,796	B. Riley Financial, Inc.	500	7,100
Summit Materials, Inc., Class A*	4,105	50,902	Barrett Business Services, Inc.	342	19,580
Trex Co., Inc.*	2,324	137,953	BrightView Holdings, Inc.*	900	9,189
Universal Forest Products, Inc.	2,349	60,980	Cardtronics PLC, Class A* Care.com, Inc.*	1,563 900	40,638
US Concrete, Inc.*	600	21,168	Career Education Corp.*	2,300	17,379 26,266
		1,001,033	Carriage Services, Inc.	600	9,300
Chemicals — 1.7%			CBIZ, Inc.*	2,140	42,158
AdvanSix, Inc.*	1,200	29,208	Chegg, Inc.*	4,100	116,522
AgroFresh Solutions, Inc.*	1,400	5,306	CorVel Corp.*	362	22,343
American Vanguard Corp.	1,078	16,375	CRA International, Inc.	274	11,659
Balchem Corp.	1,205	94,412	Cross Country Healthcare, Inc.*	1,084	7,946
Codexis, Inc.*	1,600	26,720	Deluxe Corp.	1,807	69,461
CSW Industrials, Inc.*	600	29,010	Emerald Expositions Events, Inc.	1,100	13,574
Ferro Corp.*	3,238	50,772	Ennis, Inc.	858	16,517
GCP Applied Technologies, Inc.*	2,700	66,285	Everi Holdings, Inc.*	2,500	12,875
H.B. Fuller Co.	1,980	84,487	EVERTEC, Inc.	2,139	61,389
Hawkins, Inc.	449	18,387	Evo Payments, Inc., Class A*	600	14,802
Ingevity Corp.*	1,600	133,904	ExIService Holdings, Inc.*	1,300	68,406
Innophos Holdings, Inc.	796	19,526	Forrester Research, Inc.	375	16,763
Innospec, Inc.	900	55,584	Franklin Covey Co.*	197	4,399
Intrepid Potash, Inc.*	3,700	9,620	FTI Consulting, Inc.*	1,456	97,028
Kraton Corp.*	1,241	27,103	Great Lakes Dredge & Dock Corp.*	2,751	18,212
Kronos Worldwide, Inc.	900	10,368	Green Dot Corp., Class A*	1,800	143,136
Landec Corp.*	1,218	14,421	Healthcare Services Group, Inc.	2,880	115,718
Minerals Technologies, Inc.	1,328	68,179	HealthEquity, Inc.*	2,100	125,265
Oil-Dri Corp. of America	97	2,570	Heidrick & Struggles International, Inc.	669	20,866
OMNOVA Solutions, Inc.*	1,268	9,294	Herc Holdings, Inc.*	900	23,391
PolyOne Corp.	3,155	90,233	Hertz Global Holdings, Inc.*	2,100	28,665
PQ Group Holdings, Inc.*	1,100	16,291	HMS Holdings Corp.*	3,015	84,812
Quaker Chemical Corp.	511	90,810	Huron Consulting Group, Inc.*	828	42,485
Rayonier Advanced Materials, Inc. Rogers Corp.*	1,900 660	20,235 65,380	ICF International, Inc.	748	48,455
Sensient Technologies Corp.	1,658	92,599	Information Services Group, Inc.*	1,600	6,784
Stepan Co.	808	59,792	Insperity, Inc.	1,448	135,185
Tronox Ltd., Class A	3,400	26,452	James River Group Holdings Ltd.	900	32,886
Trottox Etd., Class 71	5,100		K12, Inc.*	1,152 1,014	28,558
		1,233,323	Kelly Services, Inc., Class A Kforce, Inc.	886	20,767 27,395
Coal — 0.3%			Korn/Ferry International	2,190	86,593
Arch Coal, Inc., Class A	700	58,093	Laureate Education, Inc., Class A*	3,200	48,768
Cloud Peak Energy, Inc.*	2,900	1,062	LendingTree, Inc.*	300	65,871
CONSOL Energy, Inc.*	1,100	34,881	LiveRamp Holdings, Inc.*	2 <b>,</b> 967	114,615
Peabody Energy Corp.	3,100	94,488	LSC Communications, Inc.	1,300	9,100
SunCoke Energy, Inc.*	2,341	20,016	Matthews International Corp., Class A	1,205	48,947
Warrior Met Coal, Inc.	1,300	31,343	MAXIMUS, Inc.	2,488	161,944
		239,883	McGrath RentCorp	953	49,060
Commencial Services 5.5%			Medifast, Inc.	431	53,884
Commercial Services — 5.5%	3.700	442 525	MoneyGram International, Inc.*	1,078	2,156
Aaron's, Inc.	2,700	113,535	Monro, Inc.	1,237	85,044
ABM Industries, Inc.	2,539	81,527	Multi-Color Corp.	567	19,896
Acacia Research Corp.*	1,880	5,602 104 104	National Research Corp.	387	14,760
Adtalem Global Education, Inc.* Alarm.com Holdings, Inc.*	2,200	104,104 62,244	Navigant Consulting, Inc.	1,584	38,095
American Public Education, Inc.*	1,200 755	21,487			
, and really ablic Education, IIIc.	1))	۷۱٫۳۵/			

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Commercial Services — (continued)			Computers — (continued)		
Paylocity Holding Corp.*	1,100	\$ 66,231	Sykes Enterprises, Inc.*	1,536	\$ 37,985
PFSweb, Inc.*	800	4,104	Tenable Holdings, Inc.*	500	11,095
PRGX Global, Inc.*	1,100	10,417	The KeyW Holding Corp.*	2,200	14,718
Quad/Graphics, Inc.	1,300	16,016	TTEC Holdings, Inc.	507	14,485
Rent-A-Center, Inc.*	1,953	31,619	Unisys Corp.*	2,224	25,865
Resources Connection, Inc.	922	13,092	USA Technologies, Inc.*	1,800	7,002
RR Donnelley & Sons Co.	2,700	10,692	Varonis Systems, Inc.*	1,100	58,190
SEACOR Marine Holdings, Inc.*	603	7,091	Virtusa Corp.* Vocera Communications, Inc.*	1,089 1,100	46,381 43,285
ServiceSource International, Inc.*	2,400	2,592	Vuzix Corp.*	1,300	6,253
Sotheby's*	1,441	57,265	vuzix corp.	1,500	
SP Plus Corp.*	893 756	26,379 85,746			1,494,096
Strategic Education, Inc. Team, Inc.*	1,183	17,331	Cosmetics & Personal Care — 0.2%		
The Brink's Co.	1,910	123,482	Edgewell Personal Care Co.*	2,100	78,435
The Hackett Group, Inc.	1,116	17,867	elf Beauty, Inc.*	800	6,928
The Providence Service Corp.*	400	24,008	Inter Parfums, Inc.	624	40,916
Travelport Worldwide Ltd.	4,700	73,414	Revlon, Inc., Class A*	570	14,358
TriNet Group, Inc.*	1,600	67,120			140,637
TrueBlue, Inc.*	1,576	35,066	Distribution 9 Whalasala 0.6%		
Vectrus, Inc.*	300	6,474	Distribution & Wholesale — 0.6%	2 5 9 4	94 960
Viad Corp.	771	38,619	Beacon Roofing Supply, Inc.* BlueLinx Holdings, Inc.*	2,581 300	81,869
Weight Watchers International, Inc.*	1,500	57,825	Castle Brands, Inc.*	5,500	7,413 4,678
Willdan Group, Inc.*	300	10,494	Core-Mark Holding Co., Inc.	1,764	41,013
		3,876,973	Essendant, Inc.	1,519	19,109
			Fossil Group, Inc.*	1,700	26,741
Computers — 2.1%	4.400	44740	H&E Equipment Services, Inc.	1,159	23,667
3D Systems Corp.*	4,400	44,748	Nexeo Solutions, Inc.*	1,000	8,590
A10 Networks, Inc.* Agilysys, Inc.*	2,000 376	12,480 5,392	Owens & Minor, Inc.	2,276	14,407
CACI International, Inc., Class A*	950	136,829	ScanSource, Inc.*	981	33,727
Carbon Black, Inc.*	1,400	18,788	SiteOne Landscape Supply, Inc.*	1,500	82,905
Carbonite, Inc.*	1,000	25,260	Titan Machinery, Inc.*	523	6,877
ConvergeOne Holdings, Inc.	900	11,142	Triton International Ltd.	1,993	61,923
Cray, Inc.*	1,599	34,522	Veritiv Corp.*	500	12,485
Diebold Nixdorf, Inc.	2,900	7,221			425,404
Digimarc Corp.*	300	4,350	Diversified Financial Services — 1.8%		
DMC Global, Inc.	700	24,584	Aircastle Ltd.	1,976	34,066
Electronics For Imaging, Inc.*	1,824	45,235	Altisource Portfolio Solutions SA*	500	11,245
Engility Holdings, Inc.*	700	19,922	Artisan Partners Asset Management, Inc.,		•
ForeScout Technologies, Inc.*	1,100	28,589	Class A	1,700	37,587
Immersion Corp.*	842	7,544	BrightSphere Investment Group PLC	3,000	32,040
Insight Enterprises, Inc.*	1,343	54,727	Cohen & Steers, Inc.	817	28,039
LivePerson, Inc.*	1,925	36,306	Cowen, Inc.*	947	12,633
Lumentum Holdings, Inc.*	2,713	113,973	Curo Group Holdings Corp.*	400	3,796
Maxwell Technologies, Inc.*	1,500	3,105	Diamond Hill Investment Group, Inc.	107	15,991
Mercury Systems, Inc.* Mitek Systems, Inc.*	1,836	86,824	Elevate Credit, Inc.*	1,100	4,928
	1,400	15,134	Ellie Mae, Inc.*	1,300	81,679
MTS Systems Corp. NetScout Systems, Inc.*	660 2 <b>,</b> 965	26,486 70,063	Encore Capital Group, Inc.* Enova International, Inc.*	997	23,430
OneSpan, Inc.*	1,028	13,313	Federal Agricultural Mortgage Corp., Class C	1,229 300	23,916 18,132
PAR Technology Corp.*	600	13,050	Federated Investors, Inc., Class B	3,700	98,235
Perspecta, Inc.	5,500	94,710	Focus Financial Partners, Inc., Class A*	700	18,431
PlayAGS, Inc.*	800	18,400	GAIN Capital Holdings, Inc.	1,800	11,088
Presidio, Inc.	1,400	18,270	GAMCO Investors, Inc., Class A	215	3,631
Qualys, Inc.*	1,300	97,162	Greenhill & Co., Inc.	800	19,520
Science Applications International Corp.	1,700	108,290	Hamilton Lane, Inc., Class A	500	18,500
Stratasys Ltd.*	1,800	32,418			•

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — (continued)	Silares		value		Silaies		value
Diversified Financial Services — (continued)				Electrical Components & Equipment —	- (continued)		
Houlihan Lokey, Inc.	1,100	\$	40,480	Generac Holdings, Inc.*	2,349	\$	116,745
Impac Mortgage Holdings, Inc.*	500		1,890	Graham Corp.	466		10,644
INTL. FCStone, Inc.*	593		21,692	Insteel Industries, Inc.	691		16,778
Investment Technology Group, Inc.	1,300		39,312	nLight, Inc.*	900		16,002
Ladenburg Thalmann Financial Services, Inc.	4,000		9,320	Novanta, Inc.*	1,300		81,900
LendingClub Corp.*	12,100		31,823	Powell Industries, Inc.	429		10,729
Marlin Business Services Corp.	200		4,466	SunPower Corp.*	2,300		11,431
Moelis & Co., Class A	1,700		58,446	Vicor Corp.*	622		23,505
Mr. Cooper Group, Inc.*	2,792		32,583	с со.р.	022	_	
Nelnet, Inc., Class A	799		41,820			_	585,484
Ocwen Financial Corp.*	3,800		5,092	Electronics — 2.1%			
On Deck Capital, Inc.*	2,200		12,980	Allied Motion Technologies, Inc.	400		17,876
Oppenheimer Holdings, Inc., Class A	238		6,081	Applied Optoelectronics, Inc.*	700		10,801
PennyMac Financial Services, Inc.	500		10,630	AVX Corp.	1,600		24,400
Piper Jaffray Cos., Inc.	587		38,648	Badger Meter, Inc.	1,118		55,017
	800		31,008	Bel Fuse, Inc., Class B	269		4,955
PJT Partners, Inc., Class A				Benchmark Electronics, Inc.	1,813		38,399
PRA Group, Inc.*	1,848		45,036	Brady Corp., Class A	1,857		80,705
Pzena Investment Management, Inc., Class A	830		7,180	Control4 Corp.*	1,000		17,600
R1 RCM, Inc.*	3,900		31,005	Electro Scientific Industries, Inc.*	1,300		38,948
Regional Management Corp.*	300		7,215	ESCO Technologies, Inc.	1,034		
Stifel Financial Corp.	2,706		112,083	FARO Technologies, Inc.*	620		68,192 25,197
Teton Advisors, Inc., Class A	2		103	<b>O</b> .			
Virtus Investment Partners, Inc.	240		19,063	Fitbit, Inc., Class A*	8,300		41,251
Waddell & Reed Financial, Inc., Class A	3,200		57,856	Fluidigm Corp.*	1,100		9,482
WageWorks, Inc.*	1,500		40,740	GoPro, Inc., Class A*	3,700		15,688
Westwood Holdings Group, Inc.	311		10,574	II-VI, Inc.*	2,356		76,476
WisdomTree Investments, Inc.	4,400		29,260	IMAX Corp.*	2,100		39,501
World Acceptance Corp.*	262		26,792	IntriCon Corp.*	200		5,276
		1	1,270,065	Iteris, Inc.*	1,200		4,476
		_	, ,	Itron, Inc.*	1,300		61,477
Electric — 2.0%				KEMET Corp.	2,200		38,588
ALLETE, Inc.	1,951		148,705	Kimball Electronics, Inc.*	933		14,452
Ameresco, Inc., Class A*	1,100		15,510	Mesa Laboratories, Inc.	100		20,839
Atlantic Power Corp.*	4,127		8,956	Methode Electronics, Inc.	1,460		34,003
Avista Corp.	2,439		103,609	Napco Security Technologies, Inc.*	600		9,450
Black Hills Corp.	2,048		128,573	NVE Corp.	209		18,296
Clearway Energy, Inc., Class A	1,500		25,380	OSI Systems, Inc.*	657		48,158
Clearway Energy, Inc., Class C	2,500		43,125	Park Electrochemical Corp.	833		15,052
El Paso Electric Co.	1,577		79,055	Plexus Corp.*	1,303		66,557
IDACORP, Inc.	1,901		176,907	Sanmina Corp.*	2,626		63,182
MGE Energy, Inc.	1,342		80,466	ShotSpotter, Inc.*	300		9,354
NorthWestern Corp.	1,880		111,747	Sparton Corp.*	400		7,276
Ormat Technologies, Inc.	1,500		78,450	Stoneridge, Inc.*	1,073		26,450
Otter Tail Corp.	1,592		79,027	Tech Data Corp.*	1,418		116,007
PNM Resources, Inc.	3,110		127,790	TTM Technologies, Inc.*	3,629		35,310
Portland General Electric Co.	3,456		158,458	Turtle Beach Corp.*	400		5,708
Spark Energy, Inc., Class A	400		2,972	Vishay Intertechnology, Inc.	5,100		91,851
Unitil Corp.	463		23,446	Vishay Precision Group, Inc.*	300		9,069
	,	_		Watts Water Technologies, Inc., Class A			72,080
			1,392,176	Woodward, Inc.	2,001		148,654
Electrical Components & Equipment — 0.8%				ZAGG, Inc.*	900		8,802
Advanced Energy Industries, Inc.*	1,493		64,095	2.00, 110.	900	_	
Belden, Inc.	1,555		64,952			_	1,494,855
Encore Wire Corp.	771		38,689	Energy-Alternate Sources — 0.4%			
Energous Corp.*	700		4,053	Clean Energy Fuels Corp.*	6,800		11,696
EnerSys	1,623		125,961	Enphase Energy, Inc.*	3,300		15,609
	1,027		,,,,,,,	FutureFuel Corp.	1,100		17,446

	Number of Shares		alue†		Number of Shares		Value†
COMMON STOCKS — (continued)			<u> </u>				
Energy-Alternate Sources — (continued)				Environmental Control — (continued)			
Green Plains, Inc.	1,467	\$	19,232	Energy Recovery, Inc.*	1,500	\$	10,095
Pattern Energy Group, Inc., Class A	3,000		55,860	Evoqua Water Technologies Corp.*	2,900		27,840
Plug Power, Inc.*	6,800		8,432	Heritage-Crystal Clean, Inc.*	600		13,806
Renewable Energy Group, Inc.*	1,600		41,120	MSA Safety, Inc.	1,321		124,531
REX American Resources Corp.*	192		13,077	Pure Cycle Corp.*	900		8,937
Sunrun, Inc.*	3,600		39,204	Tetra Tech, Inc.	2,164		112,030
TerraForm Power, Inc., Class A	2,779		31,181	U.S. Ecology, Inc.	842	_	53,029
TPI Composites, Inc.*	400		9,832				546,599
Vivint Solar, Inc.*	800		3,048	Food — 1.5%			
		2	265,737	B&G Foods, Inc.	2,572		74,357
Engineering & Construction — 1.1%				Cal-Maine Foods, Inc.	1,246		52,706
Aegion Corp.*	1,255		20,482	Calavo Growers, Inc.	651		47,497
Argan, Inc.	536		20,282	Darling Ingredients, Inc.*	6,267		120,577
Dycom Industries, Inc.*	1,153		62,308	Dean Foods Co.	3,700		14,097
EMCOR Group, Inc.	2,263	-	135,079	Fresh Del Monte Produce, Inc.	1,316		37,203
Exponent, Inc.	1,880		95,335	Hostess Brands, Inc.*	3,800		41,572
Granite Construction, Inc.	1,733		69,805	Ingles Markets, Inc., Class A	604		16,441
IES Holdings, Inc.*	400		6,220	J&J Snack Foods Corp.	596		86,176
Infrastructure and Energy Alternatives, Inc.*	900		7,371	John B. Sanfilippo & Son, Inc.	300		16,698
KBR, Inc.	5,200		78,936	Lancaster Colony Corp.	733		129,638
MasTec, Inc.*	2,364		95,884	Nutrisystem, Inc.	1,080		47,390
Mistras Group, Inc.*	800		11,504	Performance Food Group Co.*	3,800		122,626
MYR Group, Inc.*	683		19,240	Sanderson Farms, Inc.	734		72,879
NV5 Global, Inc.*	300		18,165	Seneca Foods Corp., Class A*	211		5,954
Orion Group Holdings, Inc.*	1,137		4,878	Smart & Final Stores, Inc.*	1,100		5,214
Sterling Construction Co.*	1,000		10,890	SpartanNash Co.	1,530		26,285
TopBuild Corp.*	1,400		63,000	The Chefs' Warehouse, Inc.*	750		23,985
Tutor Perini Corp.*	1,397		22,310	The Simply Good Foods Co.*	2,300		43,470
VSE Corp.	308		9,212	Tootsie Roll Industries, Inc.	699		23,347
Willscot Corp.*	1,200		11,304	United Natural Foods, Inc.*	1,900		20,121
		7	762,205	Village Super Market, Inc., Class A	268		7,166
F. J. J. J. J. J. J. D. O.				Weis Markets, Inc.	366	_	17,488
Entertainment — 0.9%	2.455		26 462			-	1,052,887
AMC Entertainment Holdings, Inc., Class A	2,155 433	,	26,463 105,626	Forest Products & Paper — 0.39			
Churchill Downs, Inc. Eldorado Resorts, Inc.*	2,500		90,525	Forest Products & Paper — 0.2% Clearwater Paper Corp.*	678		16,523
Eros International PLC*	1,200		9,948	Neenah, Inc.	674		39,712
Golden Entertainment, Inc.*	800		12,816	P.H. Glatfelter Co.	1,659		16,192
International Speedway Corp., Class A	858		37,632	Schweitzer-Mauduit International, Inc.	1,176		29,459
Marriott Vacations Worldwide Corp.	1,479		104,284	Verso Corp., Class A*	1,300		29,120
National CineMedia, Inc.	2,374		15,384	1 c. 50 co. p.y c. c. 57 t	.,500	_	
Penn National Gaming, Inc.*	4,032		75,923			_	131,006
RCI Hospitality Holdings, Inc.	400		8,932	Gas — 1.1%			
Reading International, Inc., Class A*	700		10,178	Chesapeake Utilities Corp.	635		51,626
Red Rock Resorts, Inc., Class A	2,700		54,837	New Jersey Resources Corp.	3,364		153,634
Scientific Games Corp.*	2,100		37,548	Northwest Natural Holding Co.	1,050		63,483
SeaWorld Entertainment, Inc.*	2,100		46,389	ONE Gas, Inc.	2,000		159,200
Speedway Motorsports, Inc.	316		5,141	RGC Resources, Inc.	400		11,984
			541,626	South Jersey Industries, Inc.	3,380		93,964
			311,020	Southwest Gas Holdings, Inc.	1,786		136,629
Environmental Control — 0.8%				Spire, Inc.	1,856	_	137,492
Advanced Disposal Services, Inc.*	2,800		67,032				808,012
Advanced Emissions Solutions, Inc.	800		8,440	Hand 9 Machine Tools 0.3%		_	<u> </u>
AquaVenture Holdings Ltd.*	400		7,556	Hand & Machine Tools — 0.3%	1.670		71 610
Casella Waste Systems, Inc., Class A*	1,500		42,735	Franklin Electric Co., Inc.	1,670 3,100		71,610 103,168
CECO Environmental Corp.*	1,309		8,836	Kennametal, Inc.	ال ال		סטו ,כטו
Covanta Holding Corp.	4,600		61,732				

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Hand & Machine Tools — (continued)			Healthcare Products — (continued)		
Milacron Holdings Corp.*	2,500	\$ 29,725	STAAR Surgical Co.*	1,700	\$ 54,247
		204,503	Surmodics, Inc.*	573	27,080
Haalthaana Duadaata 2 0%			T2 Biosystems, Inc.*	1,000	3,010
Healthcare Products — 3.8%	054	40.076	Tactile Systems Technology, Inc.*	700	31,885
Accelerate Diagnostics, Inc.* Accuray, Inc.*	951 2,738	10,936 9,336	Tandem Diabetes Care, Inc.*	1,700	64,549
AngioDynamics, Inc.*	1,458	29,349	TransEnterix, Inc.*	6,000	13,560
AtriCure, Inc.*	1,200	36,720	Utah Medical Products, Inc.	100	8,308
Atrion Corp.	53	39,277	Varex Imaging Corp.*	1,500	35,520
Avanos Medical, Inc.*	1,800	80,622	ViewRay, Inc.* Wright Medical Group N.V.*	2,200	13,354
AxoGen, Inc.*	1,200	24,516	wright Medical Group N.v."	4,704	128,043
BioTelemetry, Inc.*	1,300	77,636			2,679,220
Cardiovascular Systems, Inc.*	1,300	37,037	Healthcare Services — 1.5%		
CareDx, Inc.*	1,200	30,168	AAC Holdings, Inc.*	200	280
Cerus Corp.*	5,000	25,350	Addus HomeCare Corp.*	300	20,364
CONMED Corp.	1,003	64,393	Amedisys, Inc.*	1,006	117,813
CryoLife, Inc.*	1,399	39,704	American Renal Associates Holdings, Inc.*	400	4,608
Cutera, Inc.*	500	8,510	Apollo Medical Holdings, Inc.*	100	1,985
CytoSorbents Corp.*	1,100	8,888	Brookdale Senior Living, Inc.*	7,100	47,570
Endologix, Inc.*	3,198	2,290	Capital Senior Living Corp.*	1,036	7,045
FONAR Corp.*	200	4,048	Civitas Solutions, Inc.*	400	7,004
GenMark Diagnostics, Inc.*	1,700	8,262	Community Health Systems, Inc.*	3,600	10,152
Genomic Health, Inc.*	709	45,667	Evolus, Inc.*	300	3,570
Glaukos Corp.*	1,300	73,021	Genesis Healthcare, Inc.*	1,861	2,196
Globus Medical, Inc., Class A*	2,700	116,856	Invitae Corp.*	2,400	26,544
Haemonetics Corp.*	1,946	194,697	LHC Group, Inc.*	1,118	104,958
Inogen, Inc.*	700	86,919	Magellan Health, Inc.*	941	53,533
Inspire Medical Systems, Inc.*	300	12,675	Medpace Holdings, Inc.*	800	42,344
Integer Holdings Corp.*	1,193	90,978	Natera, Inc.*	1,200	16,752
Intersect ENT, Inc.*	1,100	30,998	National HealthCare Corp.	406	31,851
Invacare Corp.	1,190	5,117	RadNet, Inc.*	1,500	15,255
iRhythm Technologies, Inc.*	900	62,532	Select Medical Holdings Corp.*	4,100	62,935
Lantheus Holdings, Inc.*	1,600	25,040	Surgery Partners, Inc.*	700	6,853
LeMaitre Vascular, Inc.	700	16,548	Syneos Health, Inc.*	2,400	94,440
LivaNova PLC*	1,900	173,793	Teladoc Health, Inc.*	2,600	128,882
Luminex Corp.	1,653	38,201	Tenet Healthcare Corp.*	3,200	54,848
Meridian Bioscience, Inc.	1,760	30,554	The Ensign Group, Inc.	1,880	72,925
Merit Medical Systems, Inc.*	1,975	110,225	Tivity Health, Inc.*	1,458	36,173
NanoString Technologies, Inc.*	600	8,898	Triple-S Management Corp., Class B*	891	15,494
Natus Medical, Inc.*	1,275	43,388	U.S. Physical Therapy, Inc.	491	50,254
Nevro Corp.*	1,100	42,779			1,036,628
Novocure Ltd.*	2,700	90,396	Holding Companies 0.1%		
NuVasive, Inc.*	2,006	99,417	Holding Companies — 0.1%	1 600	E2 710
Nuvectra Corp.*	500	8,170	FCB Financial Holdings, Inc., Class A*	1,600	53,728
NxStage Medical, Inc.*	2,584	73,954	National Bank Holdings Corp., Class A	1,000 1,100	30,870
Ocular Therapeutix, Inc.*	700	2,786	Tiptree, Inc.	1, 100	6,149
OPKO Health, Inc.*	12,301	37,026			90,747
OraSure Technologies, Inc.*	2,201	25,708	Home Builders — 0.8%		
Orthofix Medical, Inc.*	671	35,221	Beazer Homes USA, Inc.*	1,424	13,499
OrthoPediatrics Corp.*	400	13,952	Cavco Industries, Inc.*	301	39,244
Oxford Immunotec Global PLC*	1,000	12,780	Century Communities, Inc.*	1,100	18,986
Patterson Cos., Inc.	3,100	60,946	Foundation Building Materials, Inc.*	500	4,155
Pulse Biosciences, Inc.* Quidel Corp.*	400 1 251	4,584 61.074	Green Brick Partners, Inc.*	1,100	7,964
, ,	1,251	61,074	Hovnanian Enterprises, Inc., Class A*	4,810	3,290
Rockwell Medical, Inc.*	1,800	4,068 10.044	Installed Building Products, Inc.*	800	26,952
SeaSpine Holdings Corp.* Sientra, Inc.*	600 1,000	10,944	KB Home	3,200	61,120
sienda, inc.	1,000	12,710	LGI Homes, Inc.*	800	36,176

	Number of Shares	Value†		Number of Shares		Value†
COMMON STOCKS — (continued)		· ·				·
Home Builders — (continued)			Insurance — (continued)			
M/I Homes, Inc.*	1,136	\$ 23,879	FGL Holdings*	5,400	\$	35,964
MDC Holdings, Inc.	1,701	47,815	Genworth Financial, Inc., Class A*	19,200		89,472
Meritage Homes Corp.*	1,490	54,713	Global Indemnity Ltd.	383		13,876
Skyline Corp.	1,100	16,159	Goosehead Insurance, Inc., Class A*	400		10,516
Tailored Brands, Inc.	1,956	26,680	Greenlight Capital Re Ltd., Class A*	1,128		9,723
Taylor Morrison Home Corp., Class A*	4,200	66,780	Hallmark Financial Services, Inc.*	255		2,726
The New Home Co., Inc.*	600	3,138	HCI Group, Inc.	300		15,243
TRI Pointe Group, Inc.*	5,700	62,301	Health Insurance Innovations, Inc., Class A*	400		10,692
William Lyon Homes, Class A*	1,000	10,690	Heritage Insurance Holdings, Inc.	800		11,776
Winnebago Industries, Inc.	1,122	27,164	Hilltop Holdings, Inc.	2,783		49,621
		550,705	Horace Mann Educators Corp.	1,480		55,426
			Independence Holding Co.	100		3,520
Home Furnishings — 0.5%	560	24.602	Investors Title Co.	39		6,891
American Woodmark Corp.*	569	31,682	Kemper Corp.	2,017		133,888
Bassett Furniture Industries, Inc.	300	6,012	Kingstone Cos., Inc.	500		8,845
Daktronics, Inc.	1,209	8,947	Kinsale Capital Group, Inc.	800		44,448
Ethan Allen Interiors, Inc.	1,028	18,082	Maiden Holdings Ltd.	2,768		4,567
Flexsteel Industries, Inc.	200	4,416	MBIA, Inc.*	3,300		29,436
Hamilton Beach Brands Holding Co., Class A	144	3,378	MGIC Investment Corp.*	14,127		147,768
Hooker Furniture Corp.	500	13,170	National General Holdings Corp.	2,400		58,104
iRobot Corp.*	982	82,233	National Western Life Group, Inc., Class A	95		28,567
Kimball International, Inc., Class B	1,244	17,652	NI Holdings, Inc.*	600		9,438
La-Z-Boy, Inc.	1,962	54,367	NMI Holdings, Inc., Class A*	2,100		37,485
Roku, Inc.*	1,700	52,088	Primerica, Inc.	1,600		156,336
Sleep Number Corp.*	1,372	43,534	ProAssurance Corp.	2,000		81,120
Universal Electronics, Inc.*	600	15,168	Protective Insurance Corp., Class B	325		5,411
		350,729	Radian Group, Inc.	8,403		137,473
Household Products & Wares — 0.5%			RLI Corp.	1,522		105,003
ACCO Brands Corp.	4,393	29,785	Safety Insurance Group, Inc.	582		47,613
Central Garden & Pet Co.*	500	17,225	Selective Insurance Group, Inc.	2,175		132,545
Central Garden & Pet Co., Class A*	1,402	43,812	State Auto Financial Corp.	476		16,203
Helen of Troy Ltd.*	995	130,524	Stewart Information Services Corp.	908		37,591
Tupperware Brands Corp.	2,000	63,140	The Navigators Group, Inc.	790		54,897
WD-40 Co.	546	100,060	Third Point Reinsurance Ltd.*	3,100		29,884
	, , ,		Trupanion, Inc.*	900		22,914
		384,546	United Fire Group, Inc.	880		48,796
Housewares — 0.0%			United Insurance Holdings Corp.	800		13,296
Lifetime Brands, Inc.	400	4,012	Universal Insurance Holdings, Inc.	1,251	_	47,438
Insurance — 3.5%					_2	,451,438
Ambac Financial Group, Inc.*	1,700	29,308	Internet — 2.7%			
American Equity Investment Life Holding Co.	3,276	91,531	1-800-Flowers.com, Inc., Class A*	737		9,014
AMERISAFE, Inc.	708	40,137	Anaplan, Inc.*	700		18,578
Argo Group International Holdings Ltd.	1,232	82,852	Blucora, Inc.*	1,796		47,845
Citizens, Inc.*	1,466	11,024	Boingo Wireless, Inc.*	1,300		26,741
CNO Financial Group, Inc.	6,393	95,128	Box, Inc., Class A*	4,900		82,712
Crawford & Co., Class B	638	5,742	Brightcove, Inc.*	1,200		8,448
Donegal Group, Inc., Class A	283	3,862	Cargurus, Inc.*	1,900		64,087
eHealth, Inc.*	720	27,662	Cars.com, Inc.*	2,800		60,200
EMC Insurance Group, Inc.	450	14,333	Carvana Co.*	1,100		35,981
Employers Holdings, Inc.	1,282	53,806	ChannelAdvisor Corp.*	900		10,215
Enstar Group Ltd.*	460	77,082	Cogent Communications Holdings, Inc.	1,619		73,195
Essent Group Ltd.*	3,700	126,466	eGain Corp.*	900		5,913
FBL Financial Group, Inc., Class A	427	28,033	Endurance International Group Holdings, Inc.*	2,100		13,965
FedNat Holding Co.	500	9,960	ePlus, Inc.*	490		34,873
			Etsy, Inc.*	4,600		218,822

	Number of Shares	/alue†		Number of Shares		Value†
COMMON STOCKS — (continued)						
Internet — (continued)			Leisure Time — (continued)			
Groupon, Inc.*	16,900	\$ 54,080	Fox Factory Holding Corp.*	1,400	\$	82,418
HealthStream, Inc.	900	21,735	Johnson Outdoors, Inc., Class A	200		11,748
Imperva, Inc.*	1,300	72,397	LCI Industries	891		59,519
Internap Corp.*	775	3,216	Liberty TripAdvisor Holdings, Inc., Class A*	2,900		46,081
Leaf Group Ltd.*	900	6,165	Lindblad Expeditions Holdings, Inc.*	700		9,422
Liberty Expedia Holdings, Inc., Class A*	2,100	82,131	Malibu Boats, Inc., Class A*	800		27,840
Limelight Networks, Inc.*	3,372	7,891	Marine Products Corp.	88		1,488
Liquidity Services, Inc.*	1,035 200	6,386	MasterCraft Boat Holdings, Inc.*	800		14,960
LiveXLive Media, Inc.* New Media Investment Group, Inc.	2,300	990 26,611	Nautilus, Inc.* Planet Fitness, Inc., Class A*	1,300 3,300		14,170 176,946
NIC, Inc.	2,629	32,810	Town Sports International Holdings, Inc.*	800		5,120
Overstock.com, Inc.*	871	11,828	Vista Outdoor, Inc.*	2,200		24,970
Pandora Media, Inc.*	9,800	79,282	vista outdoor, me.	2,200	_	
Perficient, Inc.*	1,245	27,714			_	594,299
Q2 Holdings, Inc.*	1,400	69,370	Lodging — 0.3%			
QuinStreet, Inc.*	1,815	29,457	BBX Capital Corp.	2,500		14,325
Quotient Technology, Inc.*	2,700	28,836	Belmond Ltd., Class A*	3,445		86,228
Rapid7, Inc.*	1,400	43,624	Bluegreen Vacations Corp.	400		5,172
Safeguard Scientifics, Inc.*	850	7,327	Boyd Gaming Corp.	3,066		63,711
Shutterfly, Inc.*	1,290	51,935	Century Casinos, Inc.*	1,100		8,129
Shutterstock, Inc.	800	28,808	Monarch Casino & Resort, Inc.*	485		18,498
Stamps.com, Inc.*	662	103,034	Red Lion Hotels Corp.*	800		6,560
TechTarget, Inc.*	900	10,989	The Marcus Corp.	633	_	25,004
The Meet Group, Inc.*	1,900	8,797				227,627
The Trade Desk, Inc., Class A*	1,200	139,272	Machinery - Construction & Mining — 0.1%			
TrueCar, Inc.*	3,500	31,710	Astec Industries, Inc.	798		24,092
Tucows, Inc., Class A*	400	24,024	Babcock & Wilcox Enterprises, Inc.*	1,220		476
VirnetX Holding Corp.*	1,583	3,799	Hyster-Yale Materials Handling, Inc.	344		21,314
Yelp, Inc.* Zix Corp.*	3,000 1,848	104,970 10,589	,		_	45,882
Zscaler, Inc.*	2,300	90,183			_	77,002
zscarci, inc.	2,500	 	Machinery - Diversified — 0.8%			
		 930,549	Alamo Group, Inc.	317		24,510
Investment Companies — 0.1%			Albany International Corp., Class A	1,132		70,671
Arlington Asset Investment Corp., Class A	900	6,516	Applied Industrial Technologies, Inc.	1,482		79,939
Cannae Holdings, Inc.*	2,400	41,088	Briggs & Stratton Corp.	1,636		21,399
Columbia Financial, Inc.*	1,900	29,051	Cactus, Inc., Class A* Chart Industries, Inc.*	1,400 1,177		38,374 76,540
		76,655	Columbus McKinnon Corp.	885		26,674
lyon 8 Stool 0.6%			DXP Enterprises, Inc.*	522		14,533
Iron & Steel — 0.6%  AK Steel Holding Corp.*	12,000	27,000	Gencor Industries, Inc.*	500		5,485
Allegheny Technologies, Inc.*	4,800	104,496	Hurco Cos., Inc.	200		7,140
Carpenter Technology Corp.	1,800	64,098	Ichor Holdings Ltd.*	1,100		17,930
Cleveland-Cliffs, Inc.*	11,200	86,128	Kadant, Inc.	399		32,503
Commercial Metals Co.	4,500	72,090	Lindsay Corp.	353		33,976
Ryerson Holding Corp.*	800	5,072	Manitex International, Inc.*	800		4,544
Schnitzer Steel Industries, Inc., Class A	900	19,395	NACCO Industries, Inc., Class A	122		4,136
TimkenSteel Corp.*	1,400	12,236	SPX FLOW, Inc.*	1,500		45,630
Universal Stainless & Alloy Products, Inc.*	400	6,484	Tennant Co.	736		38,353
		396,999	The Gorman-Rupp Co.	751		24,340
		 224,222	The Manitowoc Co., Inc.*	1,325		19,570
Leisure Time — 0.8%	4 400	22.477	Twin Disc, Inc.*	400	_	5,900
Acushnet Holdings Corp.	1,100	23,177				592,147
Callaway Golf Co.	3,546 1,200	54,254	Media — 1.4%			
Camping World Holdings, Inc., Class A	1,200 1,200	13,764 12,144	Central European Media Enterprises Ltd.,			
Clarus Corp. Drive Shack, Inc.*	1,200 2,400	9,408	Class A*	3,100		8,618
Escalade, Inc.	600	6,870	Daily Journal Corp.*	41		9,594
,	000	0,070	•			,

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					·
Media — (continued)			Mining — (continued)		
Entercom Communications Corp., Class A	4,800	\$ 27,408	Livent Corp.*	900	\$ 12,420
Entravision Communications Corp., Class A	2,800	8,148	Materion Corp.	857	38,556
Gannett Co., Inc.	4,800	40,944	Ring Energy, Inc.*	2,400	12,192
Gray Television, Inc.*	2,600	38,324	Smart Sand, Inc.*	700	1,554
Hemisphere Media Group, Inc.*	900	10,926	Tahoe Resources, Inc.*	11,900	43,435
Houghton Mifflin Harcourt Co.*	3,900	34,554	United States Lime & Minerals, Inc.	29	2,059
Liberty Media CorpLiberty Braves, Class A*	500	12,470	Uranium Energy Corp.*	5,300	6,625
Liberty Media CorpLiberty Braves, Class C*	1,300	32,357	US Silica Holdings, Inc.	3,100	31,558
Meredith Corp.	1,500	77,910			366,308
MSG Networks, Inc., Class A*	2,300	54,188			
Nexstar Media Group, Inc., Class A	1,649	129,677	Miscellaneous Manufacturing — 1.6%		
Saga Communications, Inc., Class A	133	4,420	Actuant Corp., Class A	2,406	50,502
Scholastic Corp.	1,156	46,541	American Outdoor Brands Corp.*	2,179	28,022
Sinclair Broadcast Group, Inc., Class A	2,717	71,566	AZZ, Inc.	976	39,391
TEGNA, Inc.	8,300	90,221	Barnes Group, Inc.	1,765	94,639
The E.W. Scripps Co., Class A	1,729	27,197	Chase Corp.	300	30,015
The New York Times Co., Class A	4,821	107,460	EnPro Industries, Inc.	817	49,102
TiVo Corp.	4,623	43,502	Fabrinet*	1,300	66,703
Tribune Publishing Co.*	700	7,938	Federal Signal Corp.	2,343	46,626
WideOpenWest, Inc.*	800	5,704	FreightCar America, Inc.*	570	3,813
World Wrestling Entertainment, Inc., Class A	1,614	120,598	GP Strategies Corp.*	400	5,044
		1,010,265	Harsco Corp.*	3,200	63,552
		1,010,205	Hillenbrand, Inc.	2,374	90,046
Metal Fabricate/Hardware — 0.9%			John Bean Technologies Corp.	1,229	88,255
Advanced Drainage Systems, Inc.	1,400	33,950	Koppers Holdings, Inc.*	820	13,973
Atkore International Group, Inc.*	1,300	25,792	LSB Industries, Inc.*	749	4,134
CIRCOR International, Inc.*	635	13,525	Lydall, Inc.*	600	12,186
Global Brass & Copper Holdings, Inc.	700	17,605	Movado Group, Inc.	660	20,869
Haynes International, Inc.	564	14,890	Myers Industries, Inc.	1,125	16,999
L.B. Foster Co., Class A*	500	7,950	NL Industries, Inc.*	90	316
Lawson Products, Inc.*	400	12,640	Park-Ohio Holdings Corp.	400	12,276
Mueller Industries, Inc.	2,188	51,112	Proto Labs, Inc.*	1,000	112,790
Mueller Water Products, Inc., Class A	6,192	56,347	Raven Industries, Inc.	1,346	48,712
NN, Inc.	1,000	6,710	SPX Corp.*	1,700	47,617
Northwest Pipe Co.*	600	13,974	Standex International Corp.	500	33,590
Olympic Steel, Inc.	231	3,296	Sturm Ruger & Co., Inc.	719	38,265
Omega Flex, Inc.	59	3,190	Synalloy Corp.	400	6,636
RBC Bearings, Inc.*	859	112,615	Tredegar Corp.	1,061	16,827
Rexnord Corp.*	4,100	94,095	Trinseo SA	1,700	77,826
Sun Hydraulics Corp.	1,059	35,148			1,118,726
The Eastern Co.	300	7,254			1,110,720
TriMas Corp.*	1,795	48,986	Office & Business Equipment — 0.1%		
Worthington Industries, Inc.	1,584	55,187	Eastman Kodak Co.*	800	2,040
-		614,266	Pitney Bowes, Inc.	7,200	42,552
					44,592
Mining — 0.5%			Office Francishings 0.4%		
Century Aluminum Co.*	1,754	12,822	Office Furnishings — 0.4%	2 222	(7.540
Coeur Mining, Inc.*	6,928	30,968	Herman Miller, Inc.	2,232	67,518
Compass Minerals International, Inc.	1,300	54,197	HNI Corp.	1,743	61,754
Covia Holdings, Corp.*	1,220	4,172	Interface, Inc.	2,395	34,129
Energy Fuels, Inc.*	2,800	7,980	Knoll, Inc.	1,953	32,185
Ferroglobe Representation & Warranty			Steelcase, Inc., Class A	3,531	52,365
Insurance Trust Units*^	2,414	0			247,951
Gold Resource Corp.	2,400	9,600	Oil & Gas — 1.5%		
Hecla Mining Co.	18,291	43,167	Abraxas Petroleum Corp.*	4,100	4,469
Kaiser Aluminum Corp.	616	55,003	. is and i ca ocam corp.	1, 100	1, 100

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)		<u>'</u>			· ·
Oil & Gas — (continued)			Oil & Gas Services — (continued)		
Adams Resources & Energy, Inc.	100	\$ 3,871	Frank's International N.V.*	3,100	\$ 16,182
Alta Mesa Resources, Inc., Class A*	3,700	3,700	FTS International, Inc.*	800	5,688
Bonanza Creek Energy, Inc.*	800	16,536	Helix Energy Solutions Group, Inc.*	5,401	29,219
California Resources Corp.*	1,700	28,968	Independence Contract Drilling, Inc.*	1,100	3,432
Callon Petroleum Co.*	8,600	55,814	ION Geophysical Corp.*	400	2,072
Carrizo Oil & Gas, Inc.*	2,965	33,475	Keane Group, Inc.*	2,300	18,814
Cobalt International Energy, Inc.*^	1	0	Key Energy Services, Inc.*	400	828
CVR Energy, Inc.	700	24,136	KLX Energy Services Holdings, Inc.*	800	18,760
Delek US Holdings, Inc.	3,179	103,349	Liberty Oilfield Services, Inc., Class A	1,700	22,015
Denbury Resources, Inc.*	16,800	28,728	Mammoth Energy Services, Inc.	500	8,990
Diamond Offshore Drilling, Inc.*	2,500	23,600	Matrix Service Co.*	987	17,707
Earthstone Energy, Inc., Class A*	700	3,164	McDermott International, Inc.*	6,913	45,211
Eclipse Resources Corp.*	1,400	1,470	MRC Global, Inc.*	3,400	41,582
EP Energy Corp., Class A*	1,800	1,260	Natural Gas Services Group, Inc.*	594	9,765
Evolution Petroleum Corp.	1,200	8,184	NCS Multistage Holdings, Inc.*	400	2,036
Gulfport Energy Corp.*	6,700	43,885	Newpark Resources, Inc.*	3,512	24,127
Halcon Resources Corp.*	4,900	8,330	Nine Energy Service, Inc.*	300	6,762
HighPoint Resources Corp.*	3,725	9,275	NOW, Inc.*	4,300	50,052
Isramco, Inc.*	21	2,489	Oceaneering International, Inc.*	3,800	45,980
Jagged Peak Energy, Inc.*	2,200	20,064	Oil States International, Inc.*	2,400	34,272
Laredo Petroleum, Inc.*	5 <b>,</b> 900	21,358	Pioneer Energy Services Corp.*	2,650	3,260
Lilis Energy, Inc.*	1,700	2,329	ProPetro Holding Corp.*	2,900	35,728
Matador Resources Co.*	3,900	60,567	SEACOR Holdings, Inc.*	600	22,200
Midstates Petroleum Co., Inc.*	400	3,004	Select Energy Services, Inc., Class A*	1,700	10,744
Murphy USA, Inc.*	1,200	91,968	Solaris Oilfield Infrastructure, Inc., Class A	1,200	14,508
Noble Corp. PLC*	9,500	24,890	SRC Energy, Inc.*	9,000	42,300
Northern Oil & Gas, Inc.*	4,100	9,266	Superior Energy Services, Inc.*	6,000	20,100
Oasis Petroleum, Inc.*	10,100	55,853	TETRA Technologies, Inc.*	5,379	9,037
Panhandle Oil and Gas, Inc., Class A	634	9,827	Thermon Group Holdings, Inc.*	1,100	22,308
Par Pacific Holdings, Inc.*	1,318	18,689	Transocean Ltd.*	3,386	23,499
PDC Energy, Inc.*	2,612	77,733	Hansocean Ltd.	),500	
Penn Virginia Corp.*	500	27,030			768,954
Resolute Energy Corp.*	800	23,184	Packaging and Containers — 0.1%		
Rowan Cos., PLC, Class A*	4,600	38,594	Greif, Inc., Class A	1,000	37,110
Sanchez Energy Corp.*	2,700	729	Greif, Inc., Class B	200	8,880
SandRidge Energy, Inc.*	1,400	10,654	UFP Technologies, Inc.*	300	9,012
SilverBow Resources, Inc.*	300	7,092	or recimenegles, mer	500	
		7,092 76,725			55,002
Southwestern Energy Co.*	22,500 800		Pharmaceuticals — 3.5%		
Talos Energy, Inc.*		13,056	Achaogen, Inc.*	1,100	1,353
Trecora Resources*	1,000 7,600	7,800	Aclaris Therapeutics, Inc.*	800	5,912
Ultra Petroleum Corp.*		5,777	Adamas Pharmaceuticals, Inc.*	700	5,978
Unit Corp.*	2,100	29,988	Aeglea BioTherapeutics, Inc.*	900	6,741
W&T Offshore, Inc.*	3,543	14,597	Aerie Pharmaceuticals, Inc.*	1,400	50,540
WildHorse Resource Development Corp.*	1,000	14,110	Aimmune Therapeutics, Inc.*	1,700	40,664
Zion Oil & Gas, Inc.*	2,300	960	Akcea Therapeutics, Inc.*	600	18,084
		1,070,547	Akebia Therapeutics, Inc.*	3,010	16,645
Oil % Cas Sorvices 1.1%			Akorn, Inc.*	3,600	12,204
Oil & Gas Services — 1.1%	F 000	27.450	Amicus Therapeutics, Inc.*	7,000	67,060
Archrock, Inc.	5,000	37,450	Amneal Pharmaceuticals, Inc.*	3,337	45,150
Basic Energy Services, Inc.*	700	2,688	Amphastar Pharmaceuticals, Inc.*	1,400	27,860
C&J Energy Services, Inc.*	2,500	33,750	Anika Therapeutics, Inc.*	500	16,805
CARBO Ceramics, Inc.*	800	2,784	Antares Pharma, Inc.*		
Dawson Geophysical Co.*	1,100	3,718	Antares Pharma, inc."  Apellis Pharmaceuticals, Inc.*	5,600 1,400	15,232 18 466
Dril-Quip, Inc.*	1,500	45,045	Aratana Therapeutics, Inc.*		18,466
Exterran Corp.*	1,300	23,010	Array BioPharma, Inc.*	900 7 548	5,517
Flotek Industries, Inc.*	2,000	2,180	Array BioPharma, Inc.* Assertio Therapeutics, Inc.*	7,548	107,559
Forum Energy Technologies, Inc.*	2,700	11,151	Assertio Therapeutics, IIIC."	2,283	8,242

	Number of Shares	/alue†		Number of Shares		Value†
COMMON STOCKS — (continued)	5.14.65	 		5.1.0.05		
Pharmaceuticals — (continued)			Pharmaceuticals — (continued)			
Athenex, Inc.*	1,600	\$ 20,304	Optinose, Inc.*	600	\$	3,720
BioScrip, Inc.*	4,411	15,747	Pacira Pharmaceuticals, Inc.*	1,600		68,832
BioSpecifics Technologies Corp.*	200	12,120	Phibro Animal Health Corp., Class A	700		22,512
Calithera Biosciences, Inc.*	1,200	4,812	Portola Pharmaceuticals, Inc.*	2,500		48,800
Cara Therapeutics, Inc.*	800	10,400	Prestige Consumer Healthcare, Inc.*	2,072		63,983
Catalyst Pharmaceuticals, Inc.*	2,800	5,376	Progenics Pharmaceuticals, Inc.*	2,601		10,924
ChemoCentryx, Inc.*	1,000	10,910	Ra Pharmaceuticals, Inc.*	500		9,100
Chimerix, Inc.*	1,700	4,369	Radius Health, Inc.*	1,500		24,735
Clovis Oncology, Inc.*	1,700	30,532	Reata Pharmaceuticals, Inc., Class A*	600		33,660
Collegium Pharmaceutical, Inc.*	1,000	17,170	Revance Therapeutics, Inc.*	1,300		26,169
Concert Pharmaceuticals, Inc.*	900	11,295	Rhythm Pharmaceuticals, Inc.*	300		8,064
Corbus Pharmaceuticals Holdings, Inc.*	1,700	9,928	Rocket Pharmaceuticals, Inc.*	800		11,856
Corcept Therapeutics, Inc.*	3,600	48,096	Seres Therapeutics, Inc.*	800		3,616
CTI BioPharma Corp.*	2,000	1,467	SIGA Technologies, Inc.*	2,000		15,800
Diplomat Pharmacy, Inc.*	2,300	30,958	Sorrento Therapeutics, Inc.*	3,300		7,920
Dova Pharmaceuticals, Inc.*	500	3,790	Spring Bank Pharmaceuticals, Inc.*	600		6,234
Durect Corp.*	3,500	1,691	Supernus Pharmaceuticals, Inc.*	1,800		59,796
Eagle Pharmaceuticals, Inc.*	400	16,116	Synergy Pharmaceuticals, Inc.*	7,600		866
Enanta Pharmaceuticals, Inc.*	600	42,498	Syros Pharmaceuticals, Inc.*	500		2,785
Endo International PLC*	8,600	62,780	Teligent, Inc.*	1,800		2,466
Esperion Therapeutics, Inc.*	900	41,400	Tetraphase Pharmaceuticals, Inc.*	1,200		1,356
FibroGen, Inc.*	2,900	134,212	TG Therapeutics, Inc.*	2,000		8,200
Flexion Therapeutics, Inc.*	1,200	13,584	Therapeutics, Inc.*	5 <b>,</b> 900		22,479
G1 Therapeutics, Inc.*	800	15,320	Tricida, Inc.*	400		9,432
Global Blood Therapeutics, Inc.*	1,900	77,995	Tyme Technologies, Inc.*	2,300		8,487
Heron Therapeutics, Inc.*	2,400	62,256	USANA Health Sciences, Inc.*	448		52,743
Heska Corp.*	200	17,220	Vanda Pharmaceuticals, Inc.*	1,941		50,718
Horizon Pharma PLC*	6 <b>,</b> 500	127,010	Vital Therapies, Inc.*	1,600		298
Immune Design Corp.*	400	520	Voyager Therapeutics, Inc.*	600		5,640
Insys Therapeutics, Inc.*	800	2,800	Xencor, Inc.*	1,800		65,088
Intra-Cellular Therapies, Inc.*	1,800	20,502	Zafgen, Inc.*	1,200		5,940
Ironwood Pharmaceuticals, Inc.*	5,161	53,468	Zogenix, Inc.*	1,575		57,425
Jounce Therapeutics, Inc.*	400	1,348	Zogenix, inc.	1,575	_	
Kadmon Holdings, Inc.*	2,700	5,616			_	2,471,359
Kala Pharmaceuticals, Inc.*	300	1,467	Pipelines — 0.1%			
Kindred Biosciences, Inc.*	1,400	15,330	Primoris Services Corp.	1,490		28,504
La Jolla Pharmaceutical Co.*			SemGroup Corp., Class A	3,000		41,340
Lannett Co., Inc.*	700 997	6,601 4,945	Tellurian, Inc.*	3,400		23,630
	200	22,544	. ca.i., i.i.e.	3, 100	_	
Madrigal Pharmaceuticals, Inc.*	3,100				_	93,474
Mallinckrodt PLC*		48,980	Publishing / Newspapers — 0.1%			
MannKind Corp.*	5,401	5,725	Cimpress N.V.*	800		82,736
Marinus Pharmaceuticals, Inc.*	1,400	4,018				
MediciNova, Inc.*	1,400	11,438	Real Estate — 0.5%			
Melinta Therapeutics, Inc.*	360	286	Consolidated-Tomoka Land Co.	124		6,510
Mersana Therapeutics, Inc.*	500	2,040	Cushman & Wakefield PLC*	1,700		24,599
Minerva Neurosciences, Inc.*	800	5,392	Forestar Group, Inc.*	160		2,216
Miragen Therapeutics, Inc.*	1,300	3,939	FRP Holdings, Inc.*	269		12,377
Mirati Therapeutics, Inc.*	700	29,694	HFF, Inc., Class A	1,500		49,740
MyoKardia, Inc.*	1,200	58,632	Kennedy-Wilson Holdings, Inc.	4,581		83,237
NantKwest, Inc.*	800	928	Marcus & Millichap, Inc.*	700		24,031
Natural Grocers by Vitamin Cottage, Inc.*	400	6,132	Newmark Group, Inc., Class A	5,600		44,912
Natural Health Trends Corp.	300	5,547	RE/MAX Holdings, Inc., Class A	700		21,525
Nature's Sunshine Products, Inc.*	200	1,630	Redfin Corp.*	2,800		40,320
Neogen Corp.*	1,869	106,533	Stratus Properties, Inc.*	300		7,194
Neos Therapeutics, Inc.*	400	660	The RMR Group, Inc., Class A	267		14,172
Odonate Therapeutics, Inc.*	400	5,632	The St. Joe Co.*	1,800		23,706

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Real Estate — (continued)			Retail — (continued)		
Trinity Place Holdings, Inc.*	900	\$ 3,906	J Alexander's Holdings, Inc.*	483	\$ 3,975
		358,445	J. Jill, Inc.*	800	4,264
_			J.C. Penney Co., Inc.*	12,100	12,584
Retail — 5.0%			Jack in the Box, Inc.	1,014	78,717
Abercrombie & Fitch Co., Class A	2,800	56,140	Kirkland's, Inc.*	827	7,881
America's Car-Mart, Inc.*	227	16,446	Lands' End, Inc.*	700	9,947
American Eagle Outfitters, Inc.	6,300	121,779	Lithia Motors, Inc., Class A	894	68,239
Asbury Automotive Group, Inc.*	749	49,928	Lumber Liquidators Holdings, Inc.*	1,033	9,834
Ascena Retail Group, Inc.*	6,713	16,850	MarineMax, Inc.*	1,000	18,310
At Home Group, Inc.*	1,700	31,722	Nathan's Famous, Inc.	100	6,645
Barnes & Noble Education, Inc.*	1,737	6,965	National Vision Holdings, Inc.*	2,300	64,791
Barnes & Noble, Inc.	2,600	18,434	Noodles & Co.*	300	2,097
Bed Bath & Beyond, Inc.	5,100	57,732	Office Depot, Inc.	19,900	51,342
Big 5 Sporting Goods Corp.	581	1,505	Ollie's Bargain Outlet Holdings, Inc.*	1,900	126,369
Big Lots, Inc.	1,700	49,164	Papa John's International, Inc.	910	36,227
Biglari Holdings, Inc., Class A*	4	2,351	Party City Holdco., Inc.*	2,100	20,958
Biglari Holdings, Inc., Class B*	40	4,543	PC Connection, Inc.	565	16,797
BJ's Restaurants, Inc.	820	41,467	PetIQ, Inc.*	400	9,388
BJ's Wholesale Club Holdings, Inc.*	2,700	59,832	PetMed Express, Inc.	713	16,584
Bloomin' Brands, Inc.	3,100	55,459	Pier 1 Imports, Inc.	3,644	1,114
BMC Stock Holdings, Inc.*	2,700	41,796	Potbelly Corp.*	1,000	8,050
Bojangles', Inc.*	500	8,040	PriceSmart, Inc.	831	49,112
Boot Barn Holdings, Inc.*	700	11,921	Red Robin Gourmet Burgers, Inc.*	520	13,894
Brinker International, Inc.	1,500	65,970	Regis Corp.*	1,332	22,577
Caleres, Inc.	1,654	46,031	RH*	700	83,874
Carrols Restaurant Group, Inc.*	1,113	10,952	Rite Aid Corp.*	40,200	28,474
Chico's FAS, Inc.	5,300	29,786	Rush Enterprises, Inc., Class A	1,135	39,135
Chuy's Holdings, Inc.*	600	10,644	Rush Enterprises, Inc., Class B	300	10,680
Citi Trends, Inc.	503	10,256	Ruth's Hospitality Group, Inc.	1,195	27,162
Conn's, Inc.*	704	13,277	Sally Beauty Holdings, Inc.*	4,700	80,135
Cracker Barrel Old Country Store, Inc.	724	115,739	Shake Shack, Inc., Class A*	900	40,878
Dave & Buster's Entertainment, Inc.	1,600	71,296	Shoe Carnival, Inc.	458	15,348
Del Frisco's Restaurant Group, Inc.*	1,000	7,150	Signet Jewelers Ltd.	2,000	63,540
Del Taco Restaurants, Inc.*	1,100	10,989	Sonic Automotive, Inc., Class A	1,134	15,604
Denny's Corp.*	2,252	36,505	Sportsman's Warehouse Holdings, Inc.*	600	2,628
Dillard's, Inc., Class A	500	30,155	Systemax, Inc.	562	13,426
Dine Brands Global, Inc.	671	45,185	Texas Roadhouse, Inc.	2,570	153,429
DSW, Inc., Class A	2,500	61,750	The Buckle, Inc.	1,049	20,288
Duluth Holdings, Inc., Class B*	500	12,615	The Cato Corp., Class A	1,104	15,754
El Pollo Loco Holdings, Inc.*	900	13,653	The Cheesecake Factory, Inc.	1,716	74,663
Express, Inc.*	3,154	16,117	The Children's Place, Inc.	594	53,513
EZCORP, Inc., Class A*	1,766	13,651	The Container Store Group, Inc.*	600	2,862
Fiesta Restaurant Group, Inc.*	1,013	15,712	The Habit Restaurants, Inc., Class A*	1,000	10,500
FirstCash, Inc.	1,639	118,582	Tile Shop Holdings, Inc.	1,300	7,124
Five Below, Inc.*	2,100	214,872	Tilly's, Inc., Class A	400	4,344
Francesca's Holdings Corp.*	1,658	1,610	Vera Bradley, Inc.*	800	6,856
Freshpet, Inc.*	1,100	35,376	Wingstop, Inc.	1,100	70,609
Gaia, Inc.*	400	4,144	Winmark Corp.	100	15,900
GameStop Corp., Class A	3,800	47,956	World Fuel Services Corp.	2,600	55,666
Genesco, Inc.*	795	35,219	Zumiez, Inc.*	703	13,477
GMS, Inc.*	1,200	17,832	,		
GNC Holdings, Inc., Class A*	2,800	6,636			3,503,159
Group 1 Automotive, Inc.	807	42,545	Savings & Loans — 1.6%		
Guess?, Inc.	2,400	49,848	Axos Financial, Inc.*	2,400	60,432
Haverty Furniture, Inc.	750	14,085	Banc of California, Inc.	1,700	22,627
Hibbett Sports, Inc.*	955	13,657	BankFinancial Corp.	609	9,105
Hudson Ltd., Class A*	1,500	25,725	Beneficial Bancorp, Inc.	2,773	39,626

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — (continued)			<del></del>				
Savings & Loans — (continued)				Semiconductors — (continued)			
Berkshire Hills Bancorp, Inc.	1,502	\$	40,509	FormFactor, Inc.*	2,629	\$	37,043
Brookline Bancorp, Inc.	2,922		40,382	Impinj, Inc.*	700		10,185
BSB Bancorp, Inc.*	300		8,418	Inphi Corp.*	1,600		51,440
Capitol Federal Financial, Inc.	5,100		65,127	Integrated Device Technology, Inc.*	4,893		236,968
Community Bankers Trust Corp.*	1,300		9,386	Kopin Corp.*	1,507		1,506
Dime Community Bancshares, Inc.	1,230		20,885	Lattice Semiconductor Corp.*	4,924		34,074
Entegra Financial Corp.*	400		8,300	MACOM Technology Solutions Holdings, Inc.*	1,622		23,535
ESSA Bancorp, Inc.	500		7,805	MaxLinear, Inc.*	2,243		39,477
First Defiance Financial Corp.	600		14,706	Nanometrics, Inc.*	900		24,597
First Financial Northwest, Inc.	100		1,547	Photronics, Inc.*	2,692		26,059
Flagstar Bancorp, Inc.*	1,100		29,040	Power Integrations, Inc.	1,095		66,773
Flushing Financial Corp.	1,138		24,501	Rambus, Inc.*	4,423		33,924
FS Bancorp, Inc.	200		8,576	Rudolph Technologies, Inc.*	1,054		21,575
Hingham Institution for Savings	100		19,774	Semtech Corp.*	2,509		115,088
Home Bancorp, Inc.	300		10,620	Silicon Laboratories, Inc.*	1,600		126,096
HomeStreet, Inc.*	1,000		21,230	SMART Global Holdings, Inc.*	400		11,880
HomeTrust Bancshares, Inc.	500		13,090	Synaptics, Inc.*	1,416		52,689
Investors Bancorp, Inc.	9,555		99,372	Ultra Clean Holdings, Inc.*	1,300		11,011
Malvern Bancorp, Inc.*	400		7,892	Veeco Instruments, Inc.*	1,654		12,256
Meridian Bancorp, Inc.	1,874		26,836	Xperi Corp.	1,823		33,525
Meta Financial Group, Inc.	900		17,451	Apen corp.	1,025	_	
MutualFirst Financial, Inc.	300		7,971			_	1,761,674
Northfield Bancorp, Inc.	1,793		24,295	Software — 4.5%			
Northwest Bancshares, Inc.	3,775		63,948	ACI Worldwide, Inc.*	4,527		125,262
OceanFirst Financial Corp.	1,710		38,492	Allscripts Healthcare Solutions, Inc.*	7,100		68,444
Oritani Financial Corp.	1,718		25,341	Altair Engineering, Inc., Class A*	1,000		27,580
Pacific Premier Bancorp, Inc.*	1,716		43,792	Alteryx, Inc., Class A*	1,100		65,417
Provident Financial Services, Inc.	2,403		57,984	Amber Road, Inc.*	600		4,938
Prudential Bancorp, Inc.	500		8,800	American Software, Inc., Class A	1,193		12,467
Riverview Bancorp, Inc.	1,100		8,008	Appfolio, Inc., Class A*	600		35,532
SI Financial Group, Inc.	500		6,365	Apptio, Inc., Class A*	1,300		49,348
• •			10,170	Asure Software, Inc.*	500		2,540
Southern Missouri Bancorp, Inc.	300		,	Avaya Holdings Corp.*	4,000		58,240
Territorial Bancorp, Inc.	243		6,313	Avid Technology, Inc.*	1,100		5,225
Timberland Bancorp, Inc.	300 1,700		6,690	Benefitfocus, Inc.*	800		36,576
United Community Financial Corp.			15,045	Blackbaud, Inc.	1,850		116,365
United Financial Bancorp, Inc. Washington Federal, Inc.	2,131 3,100		31,326	Blackline, Inc.*	1,300		53,235
,			82,801	Bottomline Technologies, Inc.*	1,545		74,160
Waterstone Financial, Inc.	1,000		16,760	Castlight Health, Inc., Class B*	3,600		7,812
WSFS Financial Corp.	1,071	_	40,602	Cision Ltd.*	2,500		29,250
		_1	,121,940	Cloudera, Inc.*	3,700		40,922
Semiconductors — 2.5%				CommVault Systems, Inc.*	1,548		91,471
Alpha & Omega Semiconductor Ltd.*	900		9,171	Computer Programs & Systems, Inc.	447		11,220
Ambarella, Inc.*	1,300		45,474	Cornerstone OnDemand, Inc.*	2,000		100,860
				Coupa Software, Inc.*			125,720
Amkor Technology, Inc.*	4,011 800		26,312	· ·	2,000		
Aquantia Corp.*			7,016	CSG Systems International, Inc.	1,281		40,697
Axcelis Technologies, Inc.*	1,025		18,245	Digi International, Inc.*	1,157		11,674
AXT, Inc.*	1,500		6,525	Donnelley Financial Solutions, Inc.*	1,000		14,030
Brooks Automation, Inc.	2,677		70,084	Ebix, Inc.	936		39,836
Cabot Microelectronics Corp.	1,061		101,166	Envestnet, Inc.*	1,713		84,262
CEVA, Inc.*	871		19,240	Everbridge, Inc.*	1,000		56,760
Cirrus Logic, Inc.*	2,281		75,684	Evolent Health, Inc., Class A*	2,600		51,870
Cohu, Inc.	1,424		22,884	Exela Technologies, Inc.*	1,800		7,002
Cree, Inc.*	3,800		162,545	Five9, Inc.*	2,200		96,184
CTS Corp.	1,263		32,699	Glu Mobile, Inc.*	4,000		32,280
Diodes, Inc.*	1,399		45,132	Hortonworks, Inc.*	2,600		37,492
Entegris, Inc.	5,370		149,796				

	Number of Shares		ıluet		Number of Shares		Value†
COMMON STOCKS — (continued)	Silares	va	iiue		Silaies		value
Software — (continued)				Telecommunications — (continued)			
HubSpot, Inc.*	1,400	\$ 17	76,022	Frontier Communications Corp.*	3,073	\$	7,314
InnerWorkings, Inc.*	1,724		6,448	Gogo, Inc.*	2,200		6,578
Inovalon Holdings, Inc., Class A*	2,500		35,450	GTT Communications, Inc.*	1,600		37,856
Instructure, Inc.*	1,200		45,012	Harmonic, Inc.*	2,870		13,546
ManTech International Corp., Class A	1,039		54,335	HC2 Holdings, Inc.*	700		1,848
Medidata Solutions, Inc.*	2,188	14	47,515	Infinera Corp.*	5,194		20,724
MicroStrategy, Inc., Class A*	375		47,906	Intelsat SA*	2,100		44,919
MINDBODY, Inc., Class A*	1,700	(	61,880	InterDigital, Inc.	1,294		85,960
MobileIron, Inc.*	2,700		12,393	Iridium Communications, Inc.*	3,500		64,575
Model N, Inc.*	1,100		14,553	j2 Global, Inc.	1,774		123,080
Monotype Imaging Holdings, Inc.	1,599	:	24,817	Knowles Corp.*	3,452		45,946
New Relic, Inc.*	1,700	1	37,649	KVH Industries, Inc.*	354		3,643
NextGen Healthcare, Inc.*	2,204		33,391	Liberty Latin America Ltd., Class A*	1,700		24,616
Omnicell, Inc.*	1,435		87,879	Liberty Latin America Ltd., Class C*	4,300		62,651
Park City Group, Inc.*	700		4,179	Loral Space & Communications, Inc.*	546		20,338
PDF Solutions, Inc.*	1,200		10,116	Maxar Technologies Ltd.	2,200		26,312
pdvWireless, Inc.*	300		11,217	NeoPhotonics Corp.*	1,300		8,424
Progress Software Corp.	1,726		61,256	NETGEAR, Inc.*	1,229		63,945
PROS Holdings, Inc.*	1,217		38,214	NII Holdings, Inc.*	3,400		14,994
QAD, Inc., Class A	392		15,417	Ooma, Inc.*	900		12,492
Ribbon Communications, Inc.*	1,843		8,883	ORBCOMM, Inc.*	2,700		22,302
Rosetta Stone, Inc.*	1,000		16,400	Plantronics, Inc.	1,267		41,938
SailPoint Technologies Holding, Inc.*	2,600		61,074	Preformed Line Products Co.	145		7,866
SendGrid, Inc.*	1,100		47,487	Quantenna Communications, Inc.*	1,400		20,090
Simulations Plus, Inc.	600		11,940	RigNet, Inc.*	500		6,320
SPS Commerce, Inc.*	700		57,666	Shenandoah Telecommunications Co.	1,718		76,021
SYNNEX Corp.	1,646		33,063	Spok Holdings, Inc.	612		8,115
Tabula Rasa HealthCare, Inc.*	700		44,632	Telenav, Inc.*	1,000		4,060
Upland Software, Inc.*	600		16,308	ViaSat, Inc.*	2,062		121,555
Verint Systems, Inc.*	2,395		01,332	Viavi Solutions, Inc.*	8,800		88,440
Veritone, Inc.*	400		1,520	Vonage Holdings Corp.*	8,500		74,205
Workiva, Inc.*	900	3	32,301	Windstream Holdings, Inc.*	1,357		2,836
,			72,926	Ü,	,	_	1,790,441
Storage & Warehousing — 0.1%				Textiles — 0.1%			
Mobile Mini, Inc.	1,777		56,420	Culp, Inc.	500		9,450
Wesco Aircraft Holdings, Inc.*	2,240		17,696	UniFirst Corp.	577		82,551
3-7	,		74,116	, <sub>F</sub>		_	92,001
			74,110			_	92,001
Telecommunications — 2.5%				Toys, Games & Hobbies — 0.0%			
8X8, Inc.*	3,400		61,336	Funko, Inc., Class A*	400		5,260
Acacia Communications, Inc.*	1,000		38,000	Transportation — 1.2%			
ADTRAN, Inc.	1,905	:	20,460	Air Transport Services Group, Inc.*	2,085		47,559
Aerohive Networks, Inc.*	1,300		4,238	ArcBest Corp.	995		34,089
Anixter International, Inc.*	1,134	(	61,588	Ardmore Shipping Corp.*	800		3,736
ATN International, Inc.	449		32,117	Atlas Air Worldwide Holdings, Inc.*	848		35,777
CalAmp Corp.*	1,400		18,214	Bristow Group, Inc.*	1,350		3,280
Calix, Inc.*	1,487		14,498	CAI International, Inc.*	660		15,332
Casa Systems, Inc.*	600		7,878	Costamare, Inc.	1,200		5,268
Ciena Corp.*	5,500		86,505	Covenant Transportation Group, Inc., Class A*	400		7,680
Cincinnati Bell, Inc.*	1,682		13,086	CryoPort, Inc.*	1,000		11,030
Clearfield, Inc.*	400		3,968	Daseke, Inc.*	1,800		6,624
Comtech Telecommunications Corp.	952		23,172	DHT Holdings, Inc.	3,900		15,288
${\it Consolidated Communications\ Holdings, Inc.}$	2,571	:	25,401	Dorian LPG Ltd.*	1,032		6,016
Extreme Networks, Inc.*	4,147		25,297	Eagle Bulk Shipping, Inc.*	1,500		6,915
Finisar Corp.*	4,221	9	91,174	Eagle balk shipping, inc.	1,500		را رون

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Small Cap Index Fund

	Number of Shares		Value†		Number of Shares	١	/alue†
COMMON STOCKS — (continued)							
Transportation — (continued)				Apartments — (continued)			
Echo Global Logistics, Inc.*	1,000	\$	20,330	Preferred Apartment Communities, Inc.,			
Era Group, Inc.*	800		6,992	Class A	1,400	\$	19,684
Forward Air Corp.	1,196		65,601				99,898
Frontline Ltd.*	2,800		15,484	- 414			
GasLog Ltd.	1,700		27,982	Building & Real Estate — 0.7%	4.406		70 700
Golar LNG Ltd.	3,800		82,688	Agree Realty Corp.	1,196		70,708
Heartland Express, Inc.	1,967		35,996	Anworth Mortgage Asset Corp.	3,731		15,073
Hub Group, Inc., Class A*	1,243		46,078	Apollo Commercial Real Estate Finance, Inc.	4,756		79,235
International Seaways, Inc.*	1,133		19,080	Ares Commercial Real Estate Corp.	1,000 3,475		13,040 23,178
Marten Transport Ltd.	1,451		23,492	Capstead Mortgage Corp.  Dynex Capital, Inc.	2,307		13,196
Matson, Inc.	1,600		51,232	Getty Realty Corp.	1,169		34,380
Nordic American Tankers Ltd.	3,567		7,134	Invesco Mortgage Capital, Inc.	4,407		63,813
Overseas Shipholding Group, Inc., Class A*	1,600		2,656	iStar, Inc.	2,718		24,924
PHI, Inc.*	593		1,097	New York Mortgage Trust, Inc.	4,700		27,683
Radiant Logistics, Inc.*	1,000		4,250	PennyMac Mortgage Investment Trust	2,292		42,677
Safe Bulkers, Inc.*	2,600		4,628	Ready Capital Corp.	700		9,681
Saia, Inc.*	961		53,643	Redwood Trust, Inc.	2,777		41,850
Scorpio Tankers, Inc.	2,600 17,200		14,378 30,272	Select Income REIT	3,300		24,288
Scorpio Tankers, Inc. Ship Finance International Ltd.			33,527	Select meanie near	3,500	_	
Teekay Corp.	3,184 1,900		6,346			_	483,726
Teekay Tankers Ltd., Class A	9,293		8,624	Diversified — 1.5%			
Tidewater, Inc.*	900		17,217	AG Mortgage Investment Trust, Inc.	1,188		18,925
Universal Logistics Holdings, Inc.	100		1,809	Arbor Realty Trust, Inc.	2,100		21,147
USA Truck, Inc.*	400		5,988	Armada Hoffler Properties, Inc.	1,400		19,684
Werner Enterprises, Inc.	1,752		51,754	Blackstone Mortgage Trust, Inc., Class A	4,200		133,812
YRC Worldwide, Inc.*	1,300		4,095	CatchMark Timber Trust, Inc., Class A	2,100		14,910
The Worldwide, inc.	1,500	_		Clipper Realty, Inc.	600		7,842
		_	840,967	Colony Credit Real Estate, Inc.	3,200		50,528
Trucking and Leasing — 0.2%				CoreCivic, Inc.	4,500		80,235
GATX Corp.	1,500		106,215	CorEnergy Infrastructure Trust, Inc.	500		16,540
Textainer Group Holdings Ltd.*	812		8,088	Cousins Properties, Inc.	15,570		123,003
The Greenbrier Cos., Inc.	1,247		49,306	Exantas Capital Corp.	1,175		11,773
			163,609	Four Corners Property Trust, Inc.	2,500		65,500
		_	<u> </u>	NexPoint Residential Trust, Inc.	600		21,030
Water — 0.5%	4 424		05.465	NorthStar Realty Europe Corp.	2,100		30,534
American States Water Co.	1,424		95,465	PotlatchDeltic Corp.	2,437		77,107
Artesian Resources Corp., Class A California Water Service Group	313		10,914	PS Business Parks, Inc. Spirit MTA REIT	765 1.600		100,215
Connecticut Water Service, Inc.	1,866		88,933	•	1,600		11,408
	419 800		28,018	STAG Industrial, Inc. The GEO Group, Inc.	3,700 4.752		92,056
Consolidated Water Co., Ltd. Middlesex Water Co.	800 531		9,328 28,329	Tier REIT, Inc.	4,752 2,000		93,614 41,260
PICO Holdings, Inc.*	792		7,239	UMH Properties, Inc.	968		11,461
SJW Group	688		38,267	Whitestone REIT	1,400		17,164
The York Water Co.	597		19,140	Whitestone NET	1, 100	_	
e ronk made. con	33,	_	325,633				,059,748
		_	<u> </u>	Diversified Financial Services — 0.3%			
TOTAL COMMON STOCKS		_	2 270 402	ARMOUR Residential REIT, Inc.	1,375		28,187
(Cost \$53,273,052)		-6	2,279,102	Cherry Hill Mortgage Investment Corp.	500		8,770
				Granite Point Mortgage Trust, Inc.	1,600		28,848
REAL ESTATE INVESTMENT TRUSTS — 7.6%  Apartments — 0.2%				Great Ajax Corp. Hannon Armstrong Sustainable Infrastructure	600		7,230
Apartments — 0.2% Bluerock Residential Growth REIT, Inc.	600		5,412	Capital, Inc.	1,700		32,385
Front Yard Residential Corp.	2,200		19,206	KKR Real Estate Finance Trust, Inc.	400		7,660
Independence Realty Trust, Inc.	3,592		32,975	Ladder Capital Corp.	3,347		51,778
Investors Real Estate Trust	461		22,621	Orchid Island Capital, Inc.	2,400		15,336
2230.3ca. 25tate 11d5t	101		,02 1	TPG RE Finance Trust, Inc.	1,200		21,936

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Small Cap Index Fund

	Number of Shares	Value†		Number of Shares	Value†
REAL ESTATE INVESTMENT TRUSTS — (conti	nued)				
Diversified Financial Services — (continued)			Real Estate — 0.3%		
Western Asset Mortgage Capital Corp.	1,597	\$ 13,319	Alexander & Baldwin, Inc.*	2,556	\$ 46,979
		215,449	CorePoint Lodging, Inc.	1,550	18,988
Haaltheara 0.0%			Essential Properties Realty Trust, Inc.	1,300	17,992
Healthcare — 0.9% CareTrust REIT, Inc.	2,795	51,596	Farmland Partners, Inc.	1,400	6,356
Community Healthcare Trust, Inc.	600	17,298	Gladstone Land Corp.	700	8,036
Global Medical REIT, Inc.	900	8,001	Global Net Lease, Inc.	2,633	46,393
Healthcare Realty Trust, Inc.	4,572	130,028	Innovative Industrial Properties, Inc.	200	9,078
LTC Properties, Inc.	1,517	63,228	Safety Income & Growth, Inc.	400	7,524
MedEquities Realty Trust, Inc.	1,100	7,524	Xenia Hotels & Resorts, Inc.	4,200	72,240
National Health Investors, Inc.	1,557	117,616			233,586
New Senior Investment Group, Inc.	2,700	11,124	Regional Malls — 0.2%		
Physicians Realty Trust	6,900	110,607	CBL & Associates Properties, Inc.	6,900	13,248
Sabra Health Care REIT, Inc.	6,793	111,949	Pennsylvania Real Estate Investment Trust	2,715	16,127
Universal Health Realty Income Trust	520	31,912	Tanger Factory Outlet Centers, Inc.	3,500	70,770
		660,883	Washington Prime Group, Inc.	7,000	34,020
Hotels & Resorts — 1.0%				,,,,,	134,165
Ashford Hospitality Trust, Inc.	3,020	12,080			154,105
Braemar Hotels & Resorts, Inc.	987	8,814	Storage & Warehousing — 0.3%		
Chatham Lodging Trust	1,900	33,592	Americold Realty Trust	3,300	84,282
Chesapeake Lodging Trust	2,389	58,172	Industrial Logistics Properties Trust	2,458	48,349
DiamondRock Hospitality Co.	7,723	70,125	Jernigan Capital, Inc.	400	7,928
Hersha Hospitality Trust	1,517	26,608	National Storage Affiliates Trust	2,100	55,566
Pebblebrook Hotel Trust	5,093	144,183			196,125
RLJ Lodging Trust	6,480	106,272	5.1.5.1.0.00		
Ryman Hospitality Properties, Inc.	1,712	114,173	Strip Centers — 0.6%	2.420	74.424
Summit Hotel Properties, Inc.	4,000	38,920	Acadia Realty Trust	3,120	74,131
Sunstone Hotel Investors, Inc.	8,747	113,799	Alexander's, Inc.	86	26,208
		726,738	Cedar Realty Trust, Inc.	2,826	8,874
Industrial — 0.8%			Kite Realty Group Trust	3,251	45,807
EastGroup Properties, Inc.	1,275	116,956	Retail Opportunity Investments Corp. RPT Realty	4,300	68,284
First Industrial Realty Trust, Inc.	4,729	136,479	Saul Centers, Inc.	3,141 351	37,535 16,574
InfraREIT, Inc.	1,700	35,734	Seritage Growth Properties, Class A	1,200	38,796
Monmouth Real Estate Investment Corp.	2,649	32,847	Urban Edge Properties	4,300	71,466
QTS Realty Trust, Inc., Class A	2,043	75,693	Urstadt Biddle Properties, Inc., Class A	1,216	23,371
Rexford Industrial Realty, Inc.	3,400	100,198	orstade biddie Froperties, me., class 70	1,210	
Terreno Realty Corp.	2,175	76,495			411,046
		574,402	TOTAL REAL ESTATE INVESTMENT TRUSTS		
Mixed Industrial/Office — 0.4%			(Cost \$5,320,218)		5,365,685
Axon Enterprise, Inc.*	2,011	87,981			
Gladstone Commercial Corp.	1,052	18,852	RIGHTS — 0.0%		
Lexington Realty Trust	8,515	69,908	A. Schulman, Inc. CVR*	1,188	2,376
One Liberty Properties, Inc.	503	12,183	Chelsea Therapeutics International Ltd. CVR*	1,600	0
Washington Real Estate Investment Trust	3,006	69,138	Corium International CVR*	900	162
-		258,062	Cubist Pharmaceuticals, Inc.*	1,200	0
			Durata Therapeutics CVR Shares*	500	0
Office Property — 0.4%			Media General CVR*	4,400	440
American Assets Trust, Inc.	1,600	64,272	Newstar Financial, Inc. CVR*	1,300	338
City Office REIT, Inc.	900	9,225	Tobira Therapeutic, Inc. CVR*	400	4,708
Easterly Government Properties, Inc.	2,300	36,064 25,201	•		
Franklin Street Properties Corp.  Mack-Cali Realty Corp.	4,045 3,500	68,565	TOTAL RIGHTS		0.024
Office Properties Income Trust	3,644	25,034	(Cost \$3,913)		8,024
Piedmont Office Realty Trust, Inc., Class A	4,900	83,496			
caone office fleatry flusty fliet, cluss A	1,700				
		311,857			

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Small Cap Index Fund

		Par		
	(000)			Value†
U.S. TREASURY OBLIGATION — 0.1% ¤				
U.S. Treasury Bill¤ 2.443%, 06/20/19 (a)				
(Cost \$98,835)	\$	100	\$	98,853
		nber of nares		
SHORT-TERM INVESTMENTS — 2.2%				
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares				
(Cost \$1,571,208)	1,5	71,208	_	1,571,208
TOTAL INVESTMENTS — 98.0%				
(Cost \$60,267,226)			6	59,322,872
Other Assets & Liabilities — 2.0%			_	1,400,691
TOTAL NET ASSETS — 100.0%			\$7	70,723,563

<sup>†</sup> See Security Valuation Note.

PLC — Public Limited Company.

CVR — Contingent Valued Rights.

REIT — Real Estate Investment Trust.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

		ASSETS	TABLE			
Description	١	Total Market /alue at !/31/2018	Level 1 Quoted Price	Sig	evel 2 nificant servable nput	Level 3 Significant Unobservable Input
COMMON STOCKS	\$6	2,279,102	\$62,279,102	\$	_	\$
REAL ESTATE						
INVESTMENT TRUSTS		5,365,685	5,365,685		_	_
RIGHTS		8,024	_		8,024	_
U.S. TREASURY						
OBLIGATION		98,853	_		98,853	_
SHORT-TERM						
INVESTMENTS		1,571,208	1,571,208		_	_
TOTAL INVESTMENTS	\$69	9,322,872	\$69,215,995	\$1	06,877	\$
		LIABILITI	ES TABLE			
Description	١	Total Market /alue at !/31/2018	Level 1 Quoted Price	Level 2 Significant Observable U Input		Level 3 Significant Unobservable Input
OTHER FINANCIAL INSTRUMENTS(1)						
Futures Contracts	\$	(74,366)	\$ (74,366)	) \$	_	\$
TOTAL						
LIABILITIES - OTHER						
FINANCIAL						
INSTRUMENTS	\$	(74,366)	\$ (74,366	) \$	_	\$

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as future contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

#### **Futures Contracts:**

Туре	Futures Contract	Expiration Date	Numbers of Contracts	Units per Contract	Closing Price	Notional Value	Unrealized Appreciation	Unrealized Depreciation
Buy/Long	Russell 2000 Mini Index	3/29/2019	25	50	\$1,349	\$1,686,250	<u> </u>	<u>\$(74,366</u> )
Total							<u> </u>	<u>\$(74,366)</u>

<sup>\*</sup> Non-income producing security.

Zero Coupon Bond. The interest rate disclosed represents the effective yield from the date of acquisition to maturity.

<sup>(</sup>a) All or portion of securities segregated as collateral for futures contracts.

	Number of Shares	Value†		Number of Shares		Value†
COMMON STOCKS — 96.3%						
Australia — 7.0%			Australia — (continued)			
AGL Energy Ltd.	5,276	\$ 76,619	Sydney Airport	8,538	\$	40,486
Alumina Ltd.	20,068	32,506	Tabcorp Holdings Ltd.	13,929		42,110
Amcor Ltd.	9,071	84,700	Telstra Corp. Ltd.	30,674		61,558
AMP Ltd.	21,837	37,696	The GPT Group	13,907		52,333
APA Group	9,267	55,511	The GPT Group, In Specie*	16,419		0
Aristocrat Leisure Ltd.	4,196	64,592	TPG Telecom Ltd.	2,240		10,161
ASX Ltd.	1,401	59,199	Transurban Group	19,958		163,806
Aurizon Holdings Ltd.	15,495	46,748	Treasury Wine Estates Ltd.	5,300		55,267
AusNet Services	11,814	12,947	Vicinity Centres	25,092		45,978
Australia & New Zealand Banking Group Ltd.	22,240	384,278	Washington H Soul Pattinson & Co. Ltd.	819		14,363
Bank of Queensland Ltd.	3,599	24,599	Wesfarmers Ltd.	8,554		194,335
Bendigo & Adelaide Bank Ltd.	4,040	30,696	Westpac Banking Corp.	26,283		464,417
BHP Group Ltd.	22,432	542,205	Woodside Petroleum Ltd.	7,252		159,743
BHP Group PLC	16,267	343,738	Woolworths Group Ltd.	10,039		208,249
BlueScope Steel Ltd.	4,455	34,366	WorleyParsons Ltd.	2,442	_	19,614
Boral Ltd.	9,502	33,067				6,932,608
Brambles Ltd.	12,161	87,008				
Caltex Australia Ltd.	2,100	37,677	Austria — 0.2%	564		25.002
Challenger Ltd.	4,465	29,851	ANDRITZ AG	564		25,902
CIMIC Group Ltd.	829	25,351	Erste Group Bank AG*	2,258		74,870
Coca-Cola Amatil Ltd.	3,824	22,055	OMV AG	1,135		49,569
Cochlear Ltd.	418	51,217	Raiffeisen Bank International AG	1,156		29,498
Coles Group Ltd.*	8,554	70,734	Verbund AG	518		22,176
Commonwealth Bank of Australia	13,494	688,297	voestalpine AG	888	_	26,484
Computershare Ltd.	3,381	40,975				228,499
Crown Resorts Ltd.	2,801	23,409	Bolgium 0.0%			
CSL Ltd.	3,473	453,636	Belgium — 0.9%	1 452		6F 409
Dexus	7,850	58,754	Ageas	1,453		65,408
Domino's Pizza Enterprises Ltd.	473	13,550	Anheuser-Busch InBev N.V.	5,803		382,296
Flight Centre Travel Group Ltd.	439	13,276	Colruyt S.A. Groupe Bruxelles Lambert S.A.	365 597		26,032 52,024
Fortescue Metals Group Ltd.	11,253	33,183	•	1,908		122,759
Goodman Group	12,025	90,078	KBC Group N.V.			
Harvey Norman Holdings Ltd.	3,235	7,201	Proximus SADP	1,133 600		30,658 60,001
Incitec Pivot Ltd.	13,612	31,464	Solvay S.A.	377		17,535
Insurance Australia Group Ltd.	17,303	85,342	Telenet Group Holding N.V. UCB S.A.			
LendLease Group	4,333	35,497	Umicore S.A.	1,013 1,648		82,739
Macquarie Group Ltd.	2,432	186,281	officore s.A.	1,040	_	65,764
Medibank Pvt. Ltd.	21,209	38,396			_	905,216
Mirvac Group	26,971	42,596	Bermuda — 0.1%			
National Australia Bank Ltd.	21,519	365,163	Jardine Strategic Holdings Ltd.	1,700		62,329
Newcrest Mining Ltd.	5,921	91,000		.,, 00	_	02,525
Oil Search Ltd.	10,741	54,102	China — 0.2%			
Orica Ltd.	2,861	34,774	BeiGene Ltd. ADR*	200		28,052
Origin Energy Ltd.*	14,077	64,214	Minth Group Ltd.	6,000		19,362
QBE Insurance Group Ltd.	10,872	77,415	Sands China Ltd.	17,600		76,754
Ramsay Health Care Ltd.	1,058	43,036	Yangzijiang Shipbuilding Holdings Ltd.	19,000	_	17,458
REA Group Ltd.	400	20,869				141,626
Rio Tinto Ltd.	2,823	156,242	Denmark — 1.7%			
Santos Ltd.	12,884	49,689		E1		6/1 1 5 5
Scentre Group	41,172	113,189	A.P. Moller - Maersk A/S, B Shares	51		64,155
SEEK Ltd.	2,700	32,211	A.P. Moller - Maersk A/S, A Shares	31		36,780
Sonic Healthcare Ltd.	2,886	45,022	Carlsberg A/S, B Shares	840		89,359
South32 Ltd.	13,128	30,987	Chr Hansen Holding A/S Coloplast A/S, B Shares	775 905		68,794 84,179
South32 Ltd. Stockland	24,967 18,731	59,392 46,468	Danske Bank A/S	5,371		106,627
		46,468 87,120				
Suncorp Group Ltd.	9,789	87,120	DSV A/S	1,404		92,724

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Denmark — (continued)			France — (continued)		
Genmab A/S*	448	\$ 73,660	Engie S.A.	14,037	\$ 201,683
H Lundbeck A/S	500	22,007	EssilorLuxottica S.A.	1,571	199,137
ISS A/S	1,307	36,592	Eurazeo S.E.	318	22,513
Novo Nordisk A/S, B Shares	13,818	634,620	Eutelsat Communications S.A.	1,342	26,439
Novozymes A/S, B Shares	1,690	75,513	Faurecia S.A.	580	21,884
Orsted A/S144A @ Pandora A/S	1,454 825	97,299 33,681	Gecina S.A.	364	47,120
Tryg A/S	965	24,338	Getlink S.E.	3,742	50,283
Vestas Wind Systems A/S	1,453	109,990	Hermes International ICADE	247	137,224
William Demant Holding A/S*	713	20,300	Iliad S.A.	232 205	17,681 28,770
8.40		1,670,618	Imad 3.A. Imerys S.A.	213	10,236
		1,070,010	Ingenico Group S.A.	455	25,811
Finland — 1.2%			Ipsen S.A.	293	37,910
Elisa OYJ	1,000	41,419	JCDecaux S.A.	510	14,329
Fortum OYJ	3,489	76,372	Kering S.A.	572	267,964
Kone OYJ, B Shares Metso OYJ	2,641 784	126,085	Klepierre S.A.	1,645	50,837
Neste OYJ	918	20,597 71,074	L'Oreal S.A.	1,937	443,233
Nokia OYJ	42,391	246,085	Legrand S.A.	2,075	117,305
Nokian Renkaat OYJ	902	27,704	LVMH Moet Hennessy Louis Vuitton S.E.	2,124	621,857
Nordea Bank Abp	23,020	193,787	Natixis S.A.	7,282	34,346
Orion OYJ, B Shares	750	26,092	Orange S.A.	15,408	249,699
Sampo OYJ, A Shares	3,451	152,947	Pernod Ricard S.A.	1,608	263,906
Stora Enso OYJ, R Shares	4,323	50,120	Peugeot S.A.	4,412	94,098
UPM-Kymmene OYJ	4,158	105,255	Publicis Groupe S.A.	1,588	90,606
Wartsila OYJ Abp	3,552	56,701	Remy Cointreau S.A. Renault S.A.	159 1 <b>,</b> 498	18,022 93,315
		1,194,238	Rexel S.A.	2,198	23,413
France — 10.0%			Safran S.A.	2,564	307,514
Accor S.A.	1,399	59,492	Sanofi	8,591	745,269
Aeroports de Paris	215	40,770	Sartorius Stedim Biotech	210	21,025
Air Liquide S.A.	3,296	409,283	Schneider Electric S.E.	4,205	285,231
Alstom S.A.	1,201	48,514	SCOR S.E.	1,198	53,858
Amundi S.A.144A @	462	24,426	SEB S.A.	179	23,134
Arkema S.A.	503	43,182	Societe BIC S.A.	226	23,087
Atos S.E.	713	58,420	Societe Generale S.A.	5,913	187,469
AXA S.A. BioMerieux	14,767 318	318,700	Sodexo S.A.	698	71,584
BNP Paribas S.A.	8,561	20,976 386,622	Suez	2,717	35,893
Bollore S.A.	7,147	28,654	Teleperformance	442	70,707
Bouygues S.A.	1,571	56,413	Thales S.A. TOTAL S.A.	831 18 <b>,</b> 236	97,108 961,861
Bureau Veritas S.A.	1,943	39,593	Ubisoft Entertainment S.A.*	622	50,110
Capgemini S.E.	1,222	121,546	Unibail-Rodamco-Westfield*	5,440	40,999
Carrefour S.A.	4,581	78,275	Unibail-Rodamco-Westfield	772	119,463
Casino Guichard Perrachon S.A.	468	19,489	Valeo S.A.	1,888	55,065
Cie de Saint-Gobain	3,857	128,039	Veolia Environnement S.A.	4,205	86,115
Cie Generale des Etablissements Michelin			Vinci S.A.	3,835	315,360
SCA	1,288	126,774	Vivendi S.A.	7,827	189,706
CNP Assurances Covivio	1,195 278	25,366 26,822	Wendel S.A.	185	22,192
Credit Agricole S.A.	8,891	95,689			9,798,288
Danone S.A.	4,739	334,017	C 9 09/		
Dassault Aviation S.A.	18	24,955	Germany — 8.0%	400	20 027
Dassault Systemes S.E.	999	118,661	1&1 Drillisch AG adidas AG	408 1,429	20,837 298,646
Edenred	1,841	67,802	Allianz S.E.	3,269	656,923
Eiffage S.A.	634	53,007	Axel Springer S.E.	327	18,527
Electricite de France S.A.	4,450	70,430	BASF S.E.	7,000	487,576
				,	,-

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — (continued)							
Germany — (continued)				Hong Kong — 3.4%			
Bayer AG		\$	497,622	AIA Group Ltd.	91,000	\$	755,920
Bayerische Motoren Werke AG	2,505		203,169	ASM Pacific Technology Ltd.	2,500		24,135
Beiersdorf AG	792		82,608	BOC Hong Kong Holdings Ltd.	28,000		103,928
Brenntag AG	1,140		49,760	CK Asset Holdings Ltd.	19,670		143,917
Commerzbank AG*	7,915		52,556	CK Hutchison Holdings Ltd.	20,628		197,992
Continental AG	852		118,629	CK Infrastructure Holdings Ltd.	5,000		37,838
Covestro AG144A @	1,472		72,900	CLP Holdings Ltd.	12,500		141,261
Daimler AG	6,958		366,791	Dairy Farm International Holdings Ltd.	2,600		23,567
Delivery Hero S.E.*144A @	704		26,283	Galaxy Entertainment Group Ltd.	18,000		113,700
Deutsche Bank AG	15,234		121,494	Hang Lung Group Ltd.	7,000		17,848
Deutsche Boerse AG	1,494		178,616	Hang Lung Properties Ltd.	14,000		26,610
Deutsche Lufthansa AG	1,773		40,041	Hang Seng Bank Ltd.	5,900		132,167
Deutsche Post AG	7,461		203,754	Henderson Land Development Co., Ltd.	10,810		53,802
Deutsche Telekom AG	25,368		431,173	HK Electric Investments & HK Electric			
Deutsche Wohnen S.E.	2,669		121,976	Investments Ltd.	20,777		20,941
E.ON S.E.	16,607		163,933	HKT Trust & HKT Ltd.	30,240		43,562
Evonik Industries AG	1,319		32,924	Hong Kong & China Gas Co., Ltd.	68,951		142,456
Fraport AG Frankfurt Airport Services	1,010		J2, J2T	Hong Kong Exchanges & Clearing Ltd.	8,765		253,384
Worldwide	349		24,977	Hongkong Land Holdings Ltd.	9,000		56,737
Fresenius Medical Care AG & Co. KGaA				Hysan Development Co., Ltd.	5,140		24,443
	1,627		105,464	Kerry Properties Ltd.	5,509		18,803
Fresenius S.E. & Co. KGaA	3,201		154,718	Link REIT	16,676		169,057
GEA Group AG	1,350		34,757	Melco Resorts & Entertainment Ltd. ADR	1,967		34,659
Hannover Rueck S.E.	474		63,881	MGM China Holdings Ltd.	8,400		14,023
HeidelbergCement AG	1,153		70,676	MTR Corp., Ltd.	11,671		61,422
Henkel AG & Co. KGaA	773		76,081	New World Development Co., Ltd.	45,832		60,534
HOCHTIEF AG	160		21,608	NWS Holdings Ltd.	10,013		20,560
HUGO BOSS AG	454		27 <b>,</b> 987	PCCW Ltd.	33,068		19,041
Infineon Technologies AG	8,762		175,430	Power Assets Holdings Ltd.	10,500		72,948
Innogy S.E.*	1,102		46,868	Shangri-La Asia Ltd. Sino Land Co., Ltd.	6,666 22,859		9,841 39,164
KION Group AG	553		28,122	SJM Holdings Ltd.	17,000		15,795
LANXESS AG	691		31,770	Sun Hung Kai Properties Ltd.	12,161		173,557
Merck KGaA	1,016		104,580	Swire Pacific Ltd., A Shares	3,500		36,953
METRO AG	1,566		24,096	Swire Properties Ltd.	9,336		32,803
MTU Aero Engines AG	398		72,278	Techtronic Industries Co., Ltd.	10,000		53,067
Muenchener Rueckversicherungs-				The Bank of East Asia Ltd.	8,642		27,409
Gesellschaft AG in Muenchen	1,126		245,579	The Wharf Holdings Ltd.	9,000		23,464
OSRAM Licht AG	667		29,027	WH Group Ltd.144A @	63,823		49,019
ProSiebenSat.1 Media S.E.	1,773		31,548	Wharf Real Estate Investment Co. Ltd.	9,000		53,828
Puma S.E.	68		33,268	Wheelock & Co., Ltd.	6,000		34,350
RWE AG	4,065		88,535	Yue Yuen Industrial Holdings Ltd.	4,500		14,406
SAP S.E.	7,491		743,480		.,,,,,,	_	
Siemens AG	5,831		650,750			_	3,348,911
Siemens Healthineers AG*144A @	1,145		47,846	Ireland — 1.2%			
Symrise AG	971		71,944	AIB Group PLC	6,225		26,249
Telefonica Deutschland Holding AG	5,808		22,860	Bank of Ireland Group PLC	7,345		40,851
thyssenkrupp AG	3,349		57,529	CRH PLC	6,459		171,078
TUI AG				Experian PLC	6,923		167,827
	3,515 1 530		50,520 30,600	James Hardie Industries PLC	3,548		38,655
Uniper S.E.	1,539		39,699	Kerry Group PLC, A Shares	1,177		116,550
United Internet AG	908		39,742	Kingspan Group PLC	1,165		49,941
Volkswagen AG	247		39,514	Paddy Power Betfair PLC	632		51,903
Vonovia S.E.	3,750		169,046	Ryanair Holdings PLC ADR*	173		12,342
Wirecard AG	897		135,225	Shire PLC	7,027		408,884
Zalando S.E.*144A @	869	_	22,454	Smurfit Kappa Group PLC	1,724	_	45,871
		_	7,828,597				1,130,151

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Isle of Man — 0.0%			Japan — (continued)		
GVC Holdings PLC	4,148	\$ 35,610	Asahi Intecc Co. Ltd.		\$ 29,614
Israel — 0.5%			Asahi Kasei Corp.	9,500	97,502
Azrieli Group Ltd.	283	13,539	Asics Corp.	1,000	12,701
Bank Hapoalim BM	8,292	52,440	Astellas Pharma, Inc.	14,200	181,428
Bank Leumi Le-Israel BM	11,337	68,532	Bandai Namco Holdings, Inc.	1,500	67,349
Bezeg The Israeli Telecommunication Corp.,	11,007	00,552	Benesse Holdings, Inc.	500	12,719
Ltd.	15,011	14,648	Bridgestone Corp.	4,600	176,483
Check Point Software Technologies Ltd.*	912	93,617	Brother Industries Ltd.	1,800	26,642
Elbit Systems Ltd.	186	21,351	Calbee, Inc.	600	18,741
Israel Chemicals Ltd.	5,884	33,457	Canon, Inc.	7,700	211,871
Mizrahi Tefahot Bank Ltd.	783	13,224	Casio Computer Co., Ltd.	1,500	17,784
Nice Ltd.*	488	52,871	Central Japan Railway Co.	1,100	232,086
Teva Pharmaceutical Industries Ltd.*	7,232		Chubu Electric Power Co., Inc.	4,500	63,942
Wix.com Ltd.*		111,247	Chugai Pharmaceutical Co., Ltd.	1,700	98,599
WIX.COIII Ltd."	300	27,102	Coca-Cola Bottlers Japan Holdings, Inc.	1,000	29,821
		502,028	Concordia Financial Group Ltd.	8,800	33,626
Italy — 2.0%			Credit Saison Co., Ltd.	1,000	11,716
Assicurazioni Generali SpA	8,789	146,899	CyberAgent, Inc.	800	30,926
Atlantia SpA*	3,881	80,318	Dai Nippon Printing Co., Ltd.	2,000	41,748
Davide Campari-Milano SpA		37,803	Dai-ichi Life Holdings, Inc.	8,100	125,790
·	4,464 61,790		Daicel Corp.	2,000	20,531
Enel SpA		358,212	Daifuku Co. Ltd.	800	36,272
Eni SpA	19,106	301,822	Daiichi Sankyo Co., Ltd.	4,400	140,737
Ferrari N.V.	907	90,250	Daikin Industries Ltd.	1,900	201,885
Intesa Sanpaolo SpA	110,416	245,855	Daito Trust Construction Co., Ltd.	600	82,142
Leonardo SpA	3,179	28,008	Daiwa House Industry Co., Ltd.	4,300	137,163
Luxottica Group SpA	1,314	77,817	Daiwa House REIT Investment Corp.	11	24,641
Mediobanca Banca di Credito Finanziario SpA	4,539	38,407	Daiwa Securities Group, Inc.	13,000	65,983
Moncler SpA	1,369	45,557	DeNA Co., Ltd.	800	13,344
Pirelli & C SpA*144A @	3,060	19,664	Denso Corp.	3,300	146,083
Poste Italiane SpA144A @	4,029	32,307	Dentsu, Inc.	1,700	75,923
Prysmian SpA	1,822	35,451	Disco Corp.	200	23,254
Recordati SpA	813	28,154	Don Quijote Holdings Co., Ltd.	800	49,461
Snam SpA	17,702	77,506	East Japan Railway Co.	2,300	203,113
Telecom Italia SpA*	82,089	45,445	Eisai Co., Ltd.	1,900	147,098
Telecom Italia SpA, RSP	40,890	19,612	Electric Power Development Co., Ltd.	1,000	23,730
Terna Rete Elettrica Nasionale SpA	10,172	57,768	FamilyMart UNY Holdings Co., Ltd.	500	62,927
UniCredit SpA	15,097	171,003	FANUC Corp.	1,500	227,640
		1,937,858	Fast Retailing Co., Ltd.	400	204,296
January 33 F%			Fuji Electric Co., Ltd.	800	23,562
Japan — 23.5%	200	44.076	FUJIFILM Holdings Corp.	2,900	112,417
ABC-Mart, Inc.	200	11,076	Fujitsu Ltd.	1,500	93,504
Acom Co., Ltd.	3,200	10,410	Fukuoka Financial Group, Inc.	1,200	24,328
Aeon Co., Ltd.	4,700	91,866	Hakuhodo DY Holdings, Inc.	1,500	21,406
AEON Financial Service Co., Ltd.	700	12,419	Hamamatsu Photonics K.K.	1,000	33,513
Aeon Mall Co., Ltd.	710	11,312	Hankyu Hanshin Holdings, Inc.	1,800	59,846
AGC, Inc.	1,400	43,516	Hikari Tsushin, Inc.	200	31,261
Air Water, Inc.	1,000	15,071	Hino Motors Ltd.	2,000	18,833
Aisin Seiki Co., Ltd.	1,200	41,251	Hirose Electric Co., Ltd.	220	21,523
Ajinomoto Co., Inc.	3,400	60,415	Hisamitsu Pharmaceutical Co., Inc.	400	22,081
Alfresa Holdings Corp.	1,600	40,783	Hitachi Chemical Co., Ltd.	800	12,035
Alps Alpine Co., Ltd.	1,400	27,147	Hitachi Construction Machinery Co., Ltd.	700	16,381
Amada Holdings Co., Ltd.	2,400	21,545	Hitachi High-Technologies Corp.	500	15,657
ANA Holdings, Inc.	800	28,719	Hitachi Ltd.	7,400	196,176
Aozora Bank Ltd.	1,000	29,805	Hitachi Metals Ltd.	1,400	14,561
Asahi Group Holdings Ltd.	2,700	104,635	Honda Motor Co., Ltd.	12,500	329,313

		Number of Shares	Value†		Number of Shares	Value†
Hostbraki Corp.	COMMON STOCKS — (continued)					
Hostbraki Corp.	Japan — (continued)			Japan — (continued)		
Hulic Co., Ltd.   2,500   22,341   LXIL Group Corp.   2,100   26,034     HI Corp.   1,200   33,050   Makita Corp.   1,600   56,826     Idia Group Holdings Co., Ltd.   1,200   13,273   Marubenic Corp.   11,700   82,934     Ingse Corp.   8,100   71,773   Marubenic Corp.   11,700   82,939     Ingse Corp.   8,100   71,773   Marubenic Corp.   1,500   29,070     Istam Misskoshi Holdings Ltd.   4,500   63,122   Maruds Motor Corp.   4,500   46,262     TOCHU Corp.   10,800   183,414   McDonald's Holdings Co., appan Ltd.   400   16,931     Japan Airlines Co., Ltd.   2,000   22,891   Mebuki Financial Group, Inc.   7,010   185,655     Japan Airlines Co., Ltd.   3,000   10,371   MEU Holdings Co., Ltd.   9,00   73,348     Japan Exchange Group, Inc.   4,000   64,347     Japan Pott Bank Co., Ltd.   3,000   33,039   MisSuMi Group, Inc.   5,000   43,347     Japan Pott Bank Co., Ltd.   3,000   33,039   MisSuMi Group, Inc.   2,000   46,347     Japan Pott Bank Co., Ltd.   3,000   3,039   MisSuMi Group, Inc.   2,000   43,347     Japan Pott Bank Co., Ltd.   3,000   3,039   MisSuMi Group, Inc.   2,000   43,347     Japan Pott Bank Co., Ltd.   3,000   3,039   MisSuMi Group, Inc.   2,000   43,347     Japan Pott Bank Co., Ltd.   3,000   3,039   MisSuMi Group, Inc.   2,000   43,347     Japan Pott Bank Co., Ltd.   3,000   3,039   MisSuMi Group, Inc.   3,000   3,039     Japan Real Estate Investment Corp.   6   22,784   Missubshi Corp.   10,300   282,391     Japan Real Estate Investment Corp.   10   56,474   Missubshi Corp.   10,300   282,391     Japan Real Estate Investment Corp.   3,500   40,200     Japan Fott Bank Co., Ltd.   4,000   4,000     Japan Fott Bank Corp.   4,000   4,000     Japan		400	\$ 24,271	· · · · · · · · · · · · · · · · · · ·	600	\$ 20,492
Hulic Co, Itcl. Identisus Nosan Co, Ltd. Init Corp. Ini	Hoya Corp.	2,900	174,870	Lion Corp.	1,500	31,001
IHLGOP,   1,200   33,090   Makita Corp.   1,600   56,826   Illia Group Holdings Co, Ltd.   1,700   82,930   Inpex Corp.   8,100   71,773   Marul Group Co, Ltd.   1,500   29,070   Istan Missukoshi Holdings Ltd.   4,500   63,122   Marul Kisel Tube Itd.   300   9,471   Isuzu Motors Ltd.   1,600   63,122   Marul Kisel Tube Itd.   4,500   46,262   TüCHU Corp.   4,500   7,3348   Japan Airport Terminal Co., Ltd.   3,000   13,371   MEUI Holdings Co., Ltd.   3,000   33,309   MISUMI Croup, Inc.   2,200   46,347   Japan Fest Bank Co., Ltd.   3,000   33,039   MISUMI Croup, Inc.   2,200   46,347   Japan Fest Bank Co., Ltd.   4,000   64,347   Japan Fest Bank Co., Ltd.   4,000   46,347   Japan Fest Bank Co., Ltd.   4,000   4,0	Hulic Co., Ltd.		22,341	LIXIL Group Corp.	2,100	26,034
Idad Group Holdings Co., Ltd.   1,000   17,321   Marubeni Corp.   11,700   82,093   Ispex Corp.   8,100   71,773   Maru Group Co., Ltd.   1,500   29,070   Isetan Mitsukoshi Holdings Ltd.   2,500   27,622   Marukichi Steel Tube Ltd.   1,500   9,411   Isuzu Motors Chr.   1,680   183,414   McDonald's Holdings Co., Japan Ltd.   400   16,991   ITOCHU Corp.   10,800   183,414   McDonald's Holdings Co., Japan Ltd.   400   16,991   I, Frorn Retalling Co., Ltd.   1,000   35,441   Medipal Holdings Corp.   1,100   23,534   Japan Alfrines Co., Ltd.   1,000   35,441   Medipal Holdings Corp.   1,100   27,334   Japan Eschange Group, Inc.   4,000   64,520   MINSEPA MITSUMI, Inc.   3,000   43,240   Japan Fost Bank Co., Ltd.   3,000   33,029   MISSUMI Corp.   1,000   24,240   Japan Fost Bank Co., Ltd.   3,000   33,029   MISSUMI Corp.   1,000   26,347   Japan Fost Holdings Co., Ltd.   1,2300   142,016   Mitsubishi Chemical Holdings Corp.   1,000   262,391   Japan Recial Fund Investment Corp.   6   22,784   Mitsubishi Corp.   1,000   242,260   Japan Recial Fund Investment Corp.   20   39,911   Mitsubishi Chemical Holdings Corp.   1,000   240,260   Japan Recial Fund Investment Corp.   20   39,911   Mitsubishi Letteric Corp.   1,000   140,386   Japan Recial Fund Investment Corp.   20   39,911   Mitsubishi Material Co., Inc.   1,100   16,478   JEE Holdings, Inc.   3,800   60,528   Mitsubishi Motors Corp.   9,00   23,716   JEK Corp.   1,500   22,516   Mitsubishi Motors Corp.   9,00   23,716   JEK Corp.   1,500   22,516   Mitsubishi Motors Corp.   1,900   23,716   Kajima Corp.   400   14,325   Mitsubishi Horis Corp.   1,900   24,280   JTCH Holdings, Inc.   1,100   19,458   Mitsubishi Horis Corp.   1,900   19,486   Kajima Corp.   3,800   281,660   Mitsubishi Horis Corp.   1,900   19,486   Kajima Corp.   400   14,325   Mitsubishi Motors Corp.   1,900   19,486   Kajima Corp.   1,800   20,448   Mitsubishi Motors Corp.   1,900   19,486   Kajima Corp.   1,800   20,448   Mitsubishi Motors Corp.   1,900   19,486   Kajima Corp.   1,800   30,3	Idemitsu Kosan Co., Ltd.	1,100	35,779	M3, Inc.	3,000	40,414
Inpex Corp.	IHI Corp.	1,200	33,050	Makita Corp.	1,600	56,826
Isetan Mitsukoshi Holdings Ltd.   2,500   27,622   Maruichi Steel Tube Ltd.   300   9,411   ISEUM MOTOS Ltd.   4,500   68,112   Mazed Motor Corp.   4,500   66,262   ITOCHU Corp.   10,800   183,414   McDonald's Holdings Co., Japan Ltd.   400   16,991   Japan Alfilines Co., Ltd.   1,000   35,441   Medipal Holdings Corp.   1,100   23,534   Japan Alfilines Co., Ltd.   1,000   35,441   Medipal Holdings Corp.   1,100   23,534   Japan Exchange Group, Inc.   4,000   64,370   Milst Holdings Co., Ltd.   900   73,348   Japan Exchange Group, Inc.   4,000   64,370   Milst Holdings Corp.   1,000   24,360   Japan Post Bank Co., Ltd.   13,300   43,200   Milst Holdings Corp.   1,000   2,000   Japan Post Bank Co., Ltd.   13,300   44,2016   Milst Subshi Chemical Holdings Corp.   1,000   26,391   Japan Real Fatter Investment Corp.   6   22,704   Milst Subshi Chemical Holdings Corp.   1,000   262,391   Japan Retail Fund Investment Corp.   2   39,911   Milst Subshi Edectric Corp.   1,000   140,302   Japan Retail Fund Investment Corp.   3,800   60,528   Milst Subshi Edectric Corp.   1,000   10,6478   JET Holdings, Inc.   3,800   60,528   Milst Subshi Hacerial Co., Inc.   1,100   16,478   JEK Corp.   1,500   22,516   Milst Subshi Hacerial Co., Inc.   1,000   23,716   JIEKT Corp.   1,500   22,516   Milst Subshi Hacerial Co., Inc.   1,000   23,716   Kajajma Corp.   3,800   125,112   Milst Subshi Hacerial Co., Inc.   1,000   12,428   JITCH Holdings, Inc.   2,909   125,112   Milst Subshi Hacerial Corp.   1,900   12,7428   JITCH Goldings, Inc.   1,100   19,458   Milst Subshi Hacerial Corp.   1,900   12,748   JITCH Corp.   1,500   2,400   14,325   Milst Subshi Hacerial Corp.   1,900   12,428   JITCH Goldings, Inc.   1,100   19,458   Milst Subshi Hacerial Corp.   1,900   12,428   JITCH Goldings, Inc.   1,100   19,458   Milst Subshi Hacerial Corp.   1,900   19,468   Kajima Corp.   1,900   24,454   Milst Subshi Hacerial Corp.   1,900   19,468   Kajima Corp.   1,900   1,900   1,900   1,900   Kanasal Paint Co., Ltd.   1,000   2,469   Milst Hac	Iida Group Holdings Co., Ltd.	1,000	17,321	Marubeni Corp.	11,700	82,093
Name	Inpex Corp.	8,100	71,773	Marui Group Co., Ltd.	1,500	29,070
Inchest   Inch	Isetan Mitsukoshi Holdings Ltd.	2,500	27,622	Maruichi Steel Tube Ltd.	300	9,411
J.From Retailing Co., Ltd.	Isuzu Motors Ltd.	4,500	63,122	Mazda Motor Corp.	4,500	46,262
Japan Airlines Co., Ltd.         1,00         35,441         Medipal Holdings Corp.         1,100         23,534           Japan Airliner Terminal Co., Ltd.         300         10,371         MELI Holdings, Co., Ltd.         900         73,348           Japan Post Bank Co., Ltd.         3,000         43,260         MINEBEA MITSUMI, Inc.         3,000         43,260           Japan Post Holdings Co., Ltd.         12,300         142,016         Mitsubishi Chemical Holdings Corp.         19,500         71,772           Japan Retall Estate Investment Corp.         10         56,147         Mitsubishi Corp.         14,000         164,002           Japan Retall Fund Investment Corp.         20         39,911         Mitsubishi Estate Co., Ltd.         8,000         140,028           Japan Tobacco, Inc.         8,800         60,528         Mitsubishi Heavy Industries Ltd.         4,000         86,118           JEK Holdings, Inc.         1,600         22,519         Mitsubishi Motors Corp.         90         23,716           JRC Corp.         1,500         16,590         Mitsubishi Motors Corp.         1,000         22,516           JKTG Holdings, Inc.         24,090         125,112         Mitsubishi UF Financial Group, Inc.         90,000         424,180           Kajima Corp.         3,5	ITOCHU Corp.					
Japan Exchange Group, Inc.   4,000   64,520   MISEBA MISSUMI, Inc.   3,000   43,348   Japan Exchange Group, Inc.   4,000   33,029   MISEBA MISSUMI, Inc.   3,000   43,6347   Japan Post Bank Co., Ltd.   12,300   142,016   Mitsubishi Chemical Holdings Corp.   10,300   282,391   Japan Real Estate Investment Corp.   10   56,147   Mitsubishi Corp.   10,300   282,391   Japan Real Estate Investment Corp.   10   56,147   Mitsubishi Corp.   14,000   154,366   Japan Real Estate Investment Corp.   20   39,911   Mitsubishi Electric Corp.   14,000   154,366   Japan Retall Flund Investment Corp.   20   39,911   Mitsubishi Estate Co., Ltd.   8,900   140,285   Japan Retall Flund Investment Corp.   20   39,911   Mitsubishi Estate Co., Ltd.   8,000   140,285   Japan Retall Flund Investment Corp.   20   39,911   Mitsubishi Materials Corp.   14,000   16,478   Japan Retall Flund Investment Corp.   1,600   22,519   Mitsubishi Morts Corp.   900   23,716   Mitsubishi Morts Corp.   900   23,716   Mitsubishi Morts Corp.   900   23,716   Mitsubishi Morts Corp.   5,000   28,318   JTEKT Corp.   1,500   16,590   Mitsubishi Morts Corp.   900   27,428   JXTG Holdings, Inc.   24,090   47,016   Mitsubishi Universional Corp.   1,900   27,428   JXTG Holdings, Inc.   1,100   19,458   Mitsubishi Universional Corp.   1,900   27,428   JXTG Holdings, Inc.   1,100   19,458   Mitsubishi Universional Corp.   1,600   143,25   Mitsubishi Universional Corp.   1,600   1,430   Kanisal Paint Co., Ltd.   1,400   1,430   1,607   Kanaka Corp.   3,800   281,667   Mitsubishi Universional Corp.   1,600   1,340   Kawasaki Heavy Industries Ltd.   1,000   1,340   Kawasaki Heavy Industries Ltd.   1,000   1,340   Keiso Corp.   1,600   26,146   Mitsubishi Universional Corp.   1,400   1,488   Keiso Corp.   1,600   26,146   Mitsubishi Carp.   1,400   1,488   Keiso Grop.   1,200   64,217   Mitsubishi Carp.   1,400   1,400   1,400   Mitsubishi Carp.   1,400   1,400   1,400   1,400   Mitsubishi Carp.   1,400   1,400   1,400   1,400   Mitsubishi Carp.   1,400   1,400   1,400	J. Front Retailing Co., Ltd.	2,000		• •	7,020	
Japan Paschange Group, Inc.   4,000   64,520   MINEBEA MITSUMI, Inc.   3,000   43,260   13pan Post Bank Co., Ltd.   3,000   33,029   MISUMI Group, Inc.   2,200   45,360   13pan Post Bank Co., Ltd.   12,300   142,016   Mitsubishi Chemical Holdings Corp.   10,000   252,391   13pan Real Estate Investment Corp.   10   56,147   Mitsubishi Ectric Corp.   10,000   252,391   13pan Real Estate Investment Corp.   20   39,911   Mitsubishi Electric Corp.   14,000   154,386   13pan Retail Fund Investment Corp.   20   39,911   Mitsubishi Estate Co., Ltd.   8,900   140,028   13pan Tobacco, Inc.   3,800   60,528   Mitsubishi Estate Co., Ltd.   8,900   140,028	· · · · · · · · · · · · · · · · · · ·	1,000	35,441	Medipal Holdings Corp.	1,100	
Japan Post Bank Co., Ltd.   3,000   33,029   MISUMI Croup, Inc.   2,200   46,347   Japan Post Bank Co., Ltd.   12,300   142,016   Mitsubisir Corp.   10,300   282,391   Japan Real Estate investment Corp.   10   56,147   Mitsubisir Corp.   10,300   282,391   Japan Real Estate investment Corp.   20   39,911   Mitsubisir Bettric Corp.   14,000   154,386   Japan Real Estate investment Corp.   20   39,911   Mitsubisir Bettric Corp.   14,000   16,478   Japan Real Estate investment Corp.   20   39,911   Mitsubisir Bettate Co., Ltd.   8,000   100,028   Japan Tobacco, Inc.   3,800   197,217   Mitsubisir Bettate Co., Ltd.   1,100   16,478   JEE Holdings, Inc.   3,800   60,528   Mitsubisir Materials Corp.   900   23,716   JEE Holdings, Inc.   1,500   22,519   Mitsubisir Materials Corp.   900   23,716   JER Corp.   1,500   16,590   Mitsubisir Materials Corp.   900   23,716   JER Corp.   1,500   16,590   Mitsubisir Materials Corp.   9,000   24,428   JER Holdings, Inc.   24,090   125,112   Mitsubisir Upit Inancial Group, Inc.   90,100   442,180   Kajima Corp.   3,500   47,016   Mitsubisir Upit Inancial Group, Inc.   90,100   442,180   Kajima Corp.   400   14,325   Mitsub Go., Ltd.   1,400   19,555   Kanigumi Co., Ltd.   1,000   24,498   Mitsui Go., Ltd.   1,400   19,505   Kaneka Corp.   400   14,325   Mitsui Fudosan Co., Ltd.   1,400   155,483   Kansal Paint Co., Ltd.   1,000   24,616   Kao Corp.   3,600   44,488   Montan Group, Inc.   18,196   281,566   Kawasaki Heavy Industries Ltd.   1,000   24,616   Kabo Lord.   1,000   24,616   Keikyu Corp.   3,400   30,3191   Mitsub Group, Inc.   1,400   188,650   Keikyu Corp.   1,600   24,448   Murata Manufacturing Co., Ltd.   1,400   188,650   Keikyu Corp.   1,600   3,444   Murata Manufacturing Co., Ltd.   1,400   188,650   Keikyu Corp.   1,600   31,331   NEC Corp.   2,100   62,441   Keyence Corp.   7,82   395,559   Nexon Co., Ltd.   1,000   23,748   Koho Sapahi Pharmaceutical Co. Ltd.   4,000   31,331   NEC Corp.   1,700   193,350   Konarsut Ltd.   4,000   31,331   Nicon Corp.   1	· · · · · · · · · · · · · · · · · · ·					
Japan Post Holdings Co., Ltd.						
Japan Real Estate Investment Corp.   6   22,784   Mitsubishi Corp.   10,300   282,391   Japan Real Estate Investment Corp.   10   56,147   Mitsubishi Estate Co., Ltd.   8,900   140,028   Japan Retail Fund Investment Corp.   20   39,911   Mitsubishi Estate Co., Ltd.   8,900   140,028   Japan Tobacco, Inc.   3,800   39,717   Mitsubishi Estate Co., Ltd.   8,900   140,028   Japan Tobacco, Inc.   3,800   60,528   Mitsubishi Heavy Industries Ltd.   2,400   86,118   JCC Corp.   1,600   22,519   Mitsubishi Materials Corp.   900   23,716   JCC Corp.   1,500   22,516   Mitsubishi Materials Corp.   900   23,716   JCC Corp.   1,500   16,590   Mitsubishi Materials Corp.   900   23,716   JCC Corp.   1,500   16,590   Mitsubishi Motors Corp.   5,200   28,318   JTEKT Corp.   1,500   16,590   Mitsubishi Tanabe Pharma Corp.   1,900   27,428   JXTG Holdings, Inc.   3,500   47,016   Mitsubishi UF J Flanacial Group, Inc.   90,100   442,180   Mitsubishi UF J Flanacial Group, Inc.   1,000   16,776   Kakaku.com, Inc.   1,100   19,458   Mitsubishi UF J Flanacial Group, Inc.   1,400   31,607   Kaneka Corp.   400   14,325   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   155,483   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   155,483   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   155,483   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   21,640   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   24,651   Mitsubishi UFJ Lease & Finance Co., Ltd.   7,000   24,651   Mitsubishi UFJ Lease & Fina	•			MISUMI Group, Inc.		
Japan Real Estate Investment Corp.         10         56,147         Mitsubishi Estate Co., Itd.         8,900         140,028           Japan Tobacco, Inc.         8,300         197,217         Mitsubishi Estate Co., Itd.         8,900         140,028           JEH Foldings, Inc.         3,800         197,217         Mitsubishi Gas Chemical Co., Inc.         1,100         16,678           JEC Corp.         1,600         22,519         Mitsubishi Materials Corp.         900         23,716           JSK Corp.         1,500         22,516         Mitsubishi Materials Corp.         900         22,718           JSK Corp.         1,500         125,112         Mitsubishi Materials Corp.         9,00         27,428           JXTG Holdings, Inc.         24,090         125,112         Mitsubishi UFJ Lease & Finance Corp.         1,900         27,428           Kajima Corp.         3,500         47,016         Mitsubishi UFJ Lease & Finance Co., Ltd.         1,000         21,462           Kanigumi Corp. Ltd.         1,000         20,459         Mitsui Go., Ltd.         1,000         21,464           Kansa Paint Co., Ltd.         1,400         26,850         Mitsui Go., Ltd.         1,000         21,464           Kansa Paint Co., Ltd.         1,400         26,848         Murati						
Japan Retail Fund Investment Corp.         20         39,911         Mitsubishi Estate Co., Ltd.         8,900         140,028           Japan Tobacco, Inc.         8,300         197,217         Mitsubishi Estate Co., Ltd.         1,100         16,478           JFE Holdings, Inc.         3,800         60,528         Mitsubishi Heavy Industries Ltd.         2,400         86,118           JGC Corp.         1,500         22,516         Mitsubishi Motors Corp.         5,200         28,318           JFKT Corp.         1,500         16,590         Mitsubishi Motors Corp.         1,900         27,428           JTG Holdings, Inc.         14,090         125,112         Mitsubishi UF J Inacial Group, Inc.         90,100         442,180           Kajma Corp.         3,500         47,016         Mitsubishi UF J Inacial Group, Inc.         90,100         442,180           Kanigumi Cor, Ltd.         1,000         20,459         Mitsui G Inenicals, Inc.         1,400         31,607           Kaneka Corp.         400         14,325         Mitsui G Inenical Group, Inc.         181,980         281,568           Kansari Paint Co., Ltd.         1,00         28,348         Mitsui G Inenical Group, Inc.         181,980         281,568           Kawasaki Heavy Industries Ltd.         1,00 <t< td=""><td></td><td></td><td></td><td>•</td><td></td><td></td></t<>				•		
Japan Tobacco, Inc.         8,300         197,217         Mitsubishi Gas Chemical Co., Inc.         1,100         16,478           JFE Holdings, Inc.         3,800         60,528         Mitsubishi Meavy Industries Ltd.         2,400         86,118           JGC Corp.         1,600         22,519         Mitsubishi Materials Corp.         900         23,716           JFEKT Corp.         1,500         16,590         Mitsubishi Motors Corp.         1,900         27,428           JKTG Holdings, Inc.         24,090         125,112         Mitsubishi UFJ Financial Group, Inc.         90,100         442,180           Kajima Corp.         3,500         47,016         Mitsubishi UFJ Lease & Finance Co., Ltd.         3,500         16,776           Kakaku.com, Inc.         1,100         19,458         Mitsui G.O., Ltd.         1,400         190,505           Kanigumi Co., Ltd.         1,000         20,459         Mitsui Udosan Co., Ltd.         1,400         31,607           Kaneka Corp.         3,800         281,677         Mitsui Gosh Co. Ltd.         1,000         21,640           Kao Corp.         3,800         281,267         Mitsui Gosh Co., Ltd.         1,000         21,640           Kao Sasaki Heavy Industries Ltd.         1,000         21,340         Monotado Co., L	·		,	Mitsubishi Electric Corp.		
JFE Holdings, Inc.         3,800         60,528         Mitsubishi Materials Corp.         2,400         86,118           JGC Corp.         1,600         22,516         Mitsubishi Materials Corp.         900         23,716           JSR Corp.         1,500         22,516         Mitsubishi Motors Corp.         3,00         23,718           JTEKT Corp.         1,500         16,590         Mitsubishi UFJ Iranabe Pharma Corp.         1,900         27,428           JXTG Holdings, Inc.         1,100         19,458         Mitsubishi UFJ Lease & Finance Co., Ltd.         3,500         16,776           Kakaku.com, Inc.         1,100         19,458         Mitsui Sc.O., Ltd.         12,400         190,505           Kaneka Corp.         400         14,325         Mitsui Chemicals, Inc.         1,400         190,505           Kanesai Paint Co., Ltd.         1,400         26,890         Mitsui Grab, Ltd.         1,000         21,646           Kao Corp.         3,800         281,267         Mizuh Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         30,192         MSEADAD Insurance Group Holdings, Inc.	·					
JGC Corp.   1,600   22,519   Mitsubishi Materials Corp.   900   23,716   JSR Corp.   1,500   22,516   Mitsubishi Motors Corp.   5,200   28,318   JTEKT Corp.   1,500   16,590   Mitsubishi Motors Corp.   1,900   27,428   JXTG Holdings, Inc.   24,090   125,112   Mitsubishi Tanabe Pharma Corp.   1,900   442,180   Xajima Corp.   3,500   47,016   Mitsubishi UF Jienancial Group, Inc.   90,100   442,180   16,776   Kakaku.com, Inc.   1,100   19,458   Mitsui & Co., Ltd.   12,400   190,505   Kanigumi Co., Ltd.   1,000   20,459   Mitsui Chemicals, Inc.   1,400   31,607   Kaneka Corp.   400   14,325   Mitsui Hudosan Co., Ltd.   7,000   155,483   Kansai Paint Co., Ltd.   1,400   26,890   Mitsui OSK Lines Ltd.   1,000   21,640   Kao Corp.   3,800   281,267   Mitsui Distribe Financial Group, Inc.   811,980   281,566   Kawasaki Heavy Industries Ltd.   1,000   21,430   MonotaRO Co. Ltd.   1,000   21,640   Keihan Holdings Co., Ltd.   600   24,448   Murata Manufacturing Co., Ltd.   1,400   188,690   Keiko Corp.   13,400   30,193   MS&AD Insurance Group Holdings, Inc.   3,690   104,889   Keiban Holdings Co., Ltd.   1,400   188,690   Keiko Corp.   1,600   26,146   Nabtesco Corp.   900   19,486   Keib Corp.   1,600   24,448   Murata Manufacturing Co., Ltd.   1,400   36,871   Keisel Electric Railway Co., Ltd.   1,400   31,331   NEC Corp.   2,100   62,441   Keyence Corp.   782   395,259   Nexon Co., Ltd.   3,000   27,746   Kikhoman Corp.   1,200   64,217   NGK Insulators Ltd.   2,000   27,748   Kikhoman Corp.   1,200   64,217   NGK Insulators Ltd.   2,000   27,748   Kikhoman Corp.   1,200   64,217   NGK Insulators Ltd.   2,000   27,748   Kikhoman Corp.   1,200   18,021   Nikon Corp.   1,200   19,350   Kobayashi Pharmaceutical Co. Ltd.   400   27,126   Nikoe Corp.   1,700   192,350   Konatsu Ltd.   4,000   27,126   Nikoe Corp.   1,700   192,350   Konatsu Ltd.   4,000   31,368   Nipon Painledings Co., Ltd.   1,000   338,985   Komatsu Ltd.   4,000   36,688   Nipon Express Co., Ltd.   4,000   33,898   Konatsu Ltd.   4,000   36,688   Nip	·					
JSR Corp.         1,500         22,516         Mitsubishi Motors Corp.         5,200         28,318           JTEKT Corp.         1,500         16,590         Mitsubishi Tanabe Pharma Corp.         1,900         27,428           JXTG Holdings, Inc.         24,090         125,112         Mitsubishi UFJ Lease & Finance Co., Ltd.         3,500         447,016           Kajima Corp.         3,500         47,016         Mitsubishi UFJ Lease & Finance Co., Ltd.         3,500         16,776           Kanekaku.com, Inc.         1,100         20,459         Mitsui Chemicals, Inc.         1,400         31,607           Kaneka Corp.         400         14,325         Mitsui Gentles, Inc.         1,400         31,607           Kaneka Corp.         3,800         281,267         Mizulo Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,656           Keikyu Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         181,890         281,566           Keikyu Corp.         1,600         24,448         Murata Manufacturing Co., Ltd.         1,400         36,871           Keikei Leitcri Kailway Co., Ltd.         1,000         31,331	<b>3</b> ·			•		
JEKE T Corp.         1,500         16,590         Mitsubishi T anabe Pharma Corp.         1,900         27,428           JATG Holdings, Inc.         24,090         125,112         Mitsubishi UF J Financial Group, Inc.         90,100         442,180           Kalima Corp.         3,500         47,016         Mitsubishi UF J Lease & Finance Co., Ltd.         3,500         16,776           Kakaku.com, Inc.         1,100         19,458         Mitsui & Co., Ltd.         12,400         316,607           Kamigumi Co., Ltd.         1,000         20,459         Mitsui Funcial, Inc.         1,400         316,607           Kaneka Corp.         400         14,325         Mitsui Funcial, Inc.         1,400         21,648           Kao Corp.         3,800         281,267         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,885           Keilyu Corp.         1,600         24,448         Murata Manufacturing Co., Ltd.         1,400         38,671           Keilyu Corp.         1,00         31,313         NEC Corp.	•			•		
JXTC Holdings, Inc.         24,090         125,112         Mitsubishi UFJ Financial Group, Inc.         90,00         44,780           Kajima Corp.         3,500         47,016         Mitsubishi UFJ Lease & Finance Co., Ltd.         3,500         16,76           Kakaku.com, Inc.         1,100         19,458         Mitsui Sc.O., Ltd.         12,400         190,505           Kamigumi Co., Ltd.         1,000         20,459         Mitsui Chemicals, Inc.         1,400         31,607           Kansai Paint Co., Ltd.         1,400         26,880         Mitsui OSk Lines Ltd.         1,000         21,548           Kansai Paint Co., Ltd.         1,000         21,340         Mizuin Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         Mizuho Financial Group, Inc.         181,980         281,566           Kabusaki Heavy Industries Ltd.         1,000         22,1340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         220,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,859           Keihan Holdings Co., Ltd.         1,000         24,448         Murata Manufacturing Co., Ltd.         1,400         38,851           Keikyu Corp.         782	•					
Kajima Corp.         3,500         47,016         Mitsubishi UFJ Lease & Finance Co., Ltd.         3,500         16,776           Kakaku.com, Inc.         1,100         19,458         Mitsui & Co., Ltd.         1,2400         190,505           Kamigumi Co., Ltd.         1,000         20,459         Mitsui Lemicals, Inc.         1,400         31,607           Kaneka Corp.         400         14,325         Mitsui Hodsan Co., Ltd.         7,000         155,483           Kansai Paint Co., Ltd.         1,400         26,890         Mitsui OSK Lines Ltd.         1,000         21,640           Kao Corp.         3,800         281,267         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keiban Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keibar Letric Railway Co., Ltd.         1,000         313,331         NEC Corp.         2,100         62,441           Keisei Electric Railway Co., Ltd.         1,00         64,217	•					
Kakaku.com, Inc.         1,100         19,458         Mitsui & Co., Ltd.         12,400         190,505           Kamigumi Co., Ltd.         1,000         20,459         Mitsui i Chemicals, Inc.         1,400         31,607           Kaneka Corp.         400         14,325         Mitsui Fudosan Co., Ltd.         7,000         155,483           Kansai Paint Co., Ltd.         1,400         26,890         Mitsui OSK Lines Ltd.         1,000         21,640           Kao Corp.         3,800         281,267         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         10,000         21,340         MonotaRO Co. Ltd.         1,000         24,661           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keikan Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keikyu Corp.         1,600         26,146         Nagoya Railroad Co., Ltd.         1,400         19,486           Keio Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikhama Corp.         1,200         64,217         NGK Insulators Ltd.         2,00 <td><b>3</b> ·</td> <td></td> <td></td> <td>• • • • • • • • • • • • • • • • • • • •</td> <td></td> <td></td>	<b>3</b> ·			• • • • • • • • • • • • • • • • • • • •		
Kamigumi Co., Ltd.         1,000         20,459         Mitsui Chemicals, Inc.         1,400         31,607           Kaneka Corp.         400         14,325         Mitsui OSK Lutd.         7,000         155,483           Kanasa Paint Co., Ltd.         1,400         26,890         Mitsui OSK Lines Ltd.         1,000         21,540           Kao Corp.         3,800         281,267         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keihan Holdings Co., Ltd.         1,600         26,146         Nabtesco Corp.         900         19,486           Keikor Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,00         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,00         30,749<	· · · · · · · · · · · · · · · · · · ·					
Kaneka Corp.         400         14,325         Mitsui Fudosan Co., Ltd.         7,000         155,483           Kansai Paint Co., Ltd.         1,400         26,890         Mitsui OSK Lines Ltd.         1,000         21,648           Kao Corp.         3,800         281,566         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         221,340         MonotaRO Co. Ltd.         181,980         281,566           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keihan Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         186,550           Keikyu Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keiose Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,411           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,00         27,108           Kiritestu Group Holdings Co., Ltd.         1,300         25,489         NGK Spark Plug Co., Ltd.						
Kansai Paint Co., Ltd.         1,400         26,890         Mitsui OSK Lines Ltd.         1,000         21,660           Kao Corp.         3,800         281,267         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keihan Holdings Co., Ltd.         1600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keikyu Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keio Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kilkkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kilkkoman Corp.         1,200         64,217         NGK Insulators Ltd.         800 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
Kao Corp.         3,800         281,267         Mizuho Financial Group, Inc.         181,980         281,566           Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         320,192         Mrast An Unstrance Group Holdings, Inc.         3,690         104,889           Keihan Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keikyu Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keise Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         66,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kirite Su Group Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirite Su Group Holdings Co., Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Koba Steel Ltd.         400         27,126         Nidec Corp.         1,00	•					
Kawasaki Heavy Industries Ltd.         1,000         21,340         MonotaRO Co. Ltd.         1,000         24,651           KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keihan Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keiky Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keio Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kintetsu Group Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,355           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,7						
KDDI Corp.         13,400         320,192         MS&AD Insurance Group Holdings, Inc.         3,690         104,889           Keihan Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keikyu Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keio Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kintetsu Group Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35	•			• •		
Keihan Holdings Co., Ltd.         600         24,448         Murata Manufacturing Co., Ltd.         1,400         188,650           Keikyu Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keio Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NCK Insulators Ltd.         2,000         27,108           Kirn Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,712           Kirn Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,774           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985 </td <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>	•					
Keikyu Corp.         1,600         26,146         Nabtesco Corp.         900         19,486           Keio Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         36,741           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kintetsu Group Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968	•					
Keio Corp.         800         46,554         Nagoya Railroad Co., Ltd.         1,400         36,871           Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kintetsu Group Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         700         17,150<	<u> </u>					
Keisei Electric Railway Co., Ltd.         1,000         31,331         NEC Corp.         2,100         62,441           Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kirin Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         700         17,150           Kose Corp.         200         31,416         Nippon Express Co., Ltd.         1,100         37,472     <			,	•		
Keyence Corp.         782         395,259         Nexon Co., Ltd.*         3,000         38,729           Kikkoman Corp.         1,200         64,217         NGK Insulators Ltd.         2,000         27,108           Kintetsu Group Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konairi Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Kose Corp.         20         31,416         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         7,400         105,182         Nippon Paint Holdings Co., Ltd.         1,100         37,4	·			<u> </u>		
Kikkoman Corp.         1,200         64,217 bigstand         NGK Insulators Ltd.         2,000 bigstand         27,108           Kintetsu Group Holdings Co., Ltd.         1,300         56,489 bigstand         NGK Spark Plug Co., Ltd.         1,100 bigstand         21,774           Kirin Holdings Co., Ltd.         6,300         131,365 bigstand         NH Foods Ltd.         800 bigstand         30,074           Kobayashi Pharmaceutical Co. Ltd.         400 bigstand         27,126 bigstand         Nidec Corp.         1,700 bigstand         192,350           Kobe Steel Ltd.         2,600 bigstand         18,021 bigstand         Nikon Corp.         2,400 bigstand         35,748           Koito Manufacturing Co., Ltd.         800 bigstand         41,275 bigstand         Nintendo Co., Ltd.         900 bigstand         238,985           Komatisu Ltd.         7,000 bigstand         150,430 bigstand         Nippon Building Fund, Inc.         10 bigstand         62,968           Konami Holdings Corp.         700 bigstand         Nippon Electric Glass Co., Ltd.         700 bigstand         17,150           Kose Corp.         200 bigstand         31,416 bigstand         Nippon Express Co., Ltd.         1,100 bigstand         37,479           Kurita Water Industries Ltd.         800 bigstand         19,369 bigstand         Nippon Telegraph & Telephone Corp.	• •			•		
Kintetsu Group Holdings Co., Ltd.         1,300         56,489         NGK Spark Plug Co., Ltd.         1,100         21,774           Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kuraray Co., Ltd.         2,600         36,568         Nippon Prologis REIT, Inc.         15         31,657           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Co						
Kirin Holdings Co., Ltd.         6,300         131,365         NH Foods Ltd.         800         30,074           Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.	·					
Kobayashi Pharmaceutical Co. Ltd.         400         27,126         Nidec Corp.         1,700         192,350           Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         800         19,369         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical						
Kobe Steel Ltd.         2,600         18,021         Nikon Corp.         2,400         35,748           Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd						
Koito Manufacturing Co., Ltd.         800         41,275         Nintendo Co., Ltd.         900         238,985           Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nissh	•			•		
Komatsu Ltd.         7,000         150,430         Nippon Building Fund, Inc.         10         62,968           Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         N				·		
Konami Holdings Corp.         700         30,759         Nippon Electric Glass Co., Ltd.         700         17,150           Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	<b>3</b> .					
Konica Minolta, Inc.         3,200         28,805         Nippon Express Co., Ltd.         600         33,332           Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084						
Kose Corp.         200         31,416         Nippon Paint Holdings Co., Ltd.         1,100         37,479           Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	e .			• •		
Kubota Corp.         7,400         105,182         Nippon Prologis REIT, Inc.         15         31,657           Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	•			· · · · · · · · · · · · · · · · · · ·		
Kuraray Co., Ltd.         2,600         36,568         Nippon Steel & Sumitomo Metal Corp.         5,917         101,659           Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	·			11		
Kurita Water Industries Ltd.         800         19,369         Nippon Telegraph & Telephone Corp.         5,200         212,156           Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	·					
Kyocera Corp.         2,400         119,964         Nippon Yusen K.K.         1,300         19,878           Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084				·		
Kyowa Hakko Kirin Co., Ltd.         2,000         37,792         Nissan Chemical Corp.         1,000         52,183           Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084						
Kyushu Electric Power Co., Inc.         2,900         34,532         Nissan Motor Co., Ltd.         18,100         144,788           Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	•			• •		
Kyushu Railway Co.         1,200         40,599         Nisshin Seifun Group, Inc.         1,315         27,084	· · ·			·		
	· ·					
	Lawson, Inc.	400		Nissin Foods Holdings Co., Ltd.	500	

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Japan — (continued)			Japan — (continued)		
Nitori Holdings Co., Ltd.	600	\$ 75,144	Showa Denko K.K.	1,000	\$ 29,695
Nitto Denko Corp.	1,300	65,201	Showa Shell Sekiyu K.K.	1,600	22,167
Nomura Holdings, Inc.	26,000	98,530	SMC Corp.	400	120,429
Nomura Real Estate Holdings, Inc.	1,000	18,338	SoftBank Group Corp.	6,300	412,645
Nomura Real Estate Master Fund, Inc.*	28	36,840	Sohgo Security Services Co., Ltd.	500	23,361
Nomura Research Institute Ltd.	910	33,745	Sompo Holdings, Inc.	2,625	89,172
NSK Ltd.	3,000	25,739	Sony Corp.	9,600	462,812
NTT Data Corp.	5,000	54,649	Sony Financial Holdings, Inc.	1,200	22,364
NTT DOCOMO, Inc.	10,000	224,692	Stanley Electric Co., Ltd.	1,000	27,975
Obayashi Corp.	5,000	45,275	Subaru Corp.	4,700	100,408
Obic Co., Ltd.	500	38,594	SUMCO Corp.	1,800	20,047
Odakyu Electric Railway Co., Ltd.	2,100	46,180	Sumitomo Chemical Co., Ltd.	12,000	58,113
Oji Holdings Corp.	6,000	30,657	Sumitomo Corp.	8,500	120,605
Olympus Corp.	2,200	67,286	Sumitomo Dainippon Pharma Co., Ltd.	1,400	44,646
Omron Corp.	1,500	54,378	Sumitomo Electric Industries Ltd.	5,900	78,136
Ono Pharmaceutical Co., Ltd.	2,800	57,178	Sumitomo Heavy Industries Ltd.	800	23,721
Oracle Corp. Japan	300	19,043	Sumitomo Metal Mining Co., Ltd.	1,800	48,203
Oriental Land Co., Ltd.	1,500	150,854	Sumitomo Mitsui Financial Group, Inc.	10,200	336,244
ORIX Corp.	10,200	149,042	Sumitomo Mitsui Trust Holdings, Inc.	2,543	92,608
Osaka Gas Co., Ltd.	2,900	52,902	Sumitomo Realty & Development Co., Ltd.	2,700	98,843
Otsuka Corp.	800	22,017	Sumitomo Rubber Industries Ltd.	1,200	14,127
Otsuka Holdings Co., Ltd.	2,900	118,506	Sundrug Co., Ltd.	600	17,867
Panasonic Corp.	17,100	153,617	Suntory Beverage & Food Ltd.	1,000	45,153
Park24 Co., Ltd.	800	17,617	Suzuken Co., Ltd.	440	22,406
Persol Holdings Co. Ltd.	1,400	20,767	Suzuki Motor Corp.	2,600	131,070
Pigeon Corp.	900	38,387	Sysmex Corp.	1,300	61,738
Pola Orbis Holdings, Inc.	800	21,559	T&D Holdings, Inc.	4,300	49,740
Rakuten, Inc.*	6,300	42,264	Taiheiyo Cement Corp.	800	24,620
Recruit Holdings Co., Ltd.	8,300	200,517	Taisei Corp.	1,600	68,525
Renesas Electronics Corp.*	6,600	29,977	Taisho Pharmaceutical Holdings Co., Ltd.	300	30,110
Resona Holdings, Inc.	16,400	78,662	Taiyo Nippon Sanso Corp.	1,000	16,257
Ricoh Co., Ltd.	5,000	48,860	Takashimaya Co., Ltd.	1,000	12,768
Rinnai Corp.	300	19,754	Takeda Pharmaceutical Co., Ltd.	5,500	186,420
Rohm Co., Ltd.	700	44,677	TDK Corp.	1,000	70,005
Ryohin Keikaku Co., Ltd.	200	48,557	Teijin Ltd.	1,200	19,152
Sankyo Co., Ltd.	400	15,212	Terumo Corp.	2,300	129,732
Santen Pharmaceutical Co., Ltd.	3,000	43,285	The Bank of Kyoto Ltd.	400	16,438
SBI Holdings, Inc.	1,710	33,349	The Chiba Bank Ltd.	5,000	27,852
Secom Co., Ltd.	1,600	132,721	The Chugoku Electric Power Co., Inc.	2,100	27,291
Sega Sammy Holdings, Inc.	1,200	16,729	The Kansai Electric Power Co., Inc.	5,400	80,982
Seibu Holdings, Inc.	1,600	27,830	The Shizuoka Bank Ltd.	3,200	24,944
Seiko Epson Corp.	2,200	30,727	The Yokohama Rubber Co., Ltd.	1,000	18,702
Sekisui Chemical Co., Ltd.	3,000	44,597	THK Co., Ltd.	1,000	18,682
Sekisui House Ltd.	4,600	67,551	Tobu Railway Co., Ltd.	1,400	37,800
Seven & i Holdings Co., Ltd.	5,700	247,694	Toho Co., Ltd.	900	32,610
Seven Bank Ltd.	5,300	15,130	Toho Gas Co., Ltd.	600	25,239
SG Holdings Co. Ltd.	700	18,202	Tohoku Electric Power Co., Inc.	3,500	46,081
Sharp Corp.	1,200	12,014	Tokio Marine Holdings, Inc.	5,200	247,045
Shimadzu Corp.	1,600	31,552	Tokyo Century Corp.	300	13,213
Shimamura Co., Ltd.	200	15,315	Tokyo Electric Power Co. Holdings, Inc.*	10,600	62,964
Shimano, Inc.	600	84,580	Tokyo Electron Ltd.	1,200	135,089
Shimizu Corp.	4,000	32,540	Tokyo Gas Co., Ltd.	3,000	75,876
Shin-Etsu Chemical Co., Ltd.	2,800	215,132	Tokyu Corp.	4,000	65,364
Shinsei Bank Ltd.	1,400	16,644	Tokyu Fudosan Holdings Corp.	4,000	19,716
Shionogi & Co., Ltd.	2,100	119,859	Toppan Printing Co., Ltd.	2,000	29,398
Shiseido Co., Ltd.	2,900	181,621	Toray Industries, Inc.	11,000	77,771

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)					
Japan — (continued)			Netherlands — (continued)		
Toshiba Corp.	5,000	\$ 141,185	Koninklijke Ahold Delhaize N.V.	9,453	\$ 238,804
Tosoh Corp.	1,800	23,348	Koninklijke DSM N.V.	1,379	111,872
TOTO Ltd.	1,000	34,590	Koninklijke KPN N.V.	25,935	75,756
Toyo Seikan Group Holdings Ltd.	1,000	22,888	Koninklijke Philips N.V.	7,150	250,676
Toyo Suisan Kaisha Ltd.	600	20,894	Koninklijke Vopak N.V.	584	26,483
Toyoda Gosei Co., Ltd.	400	7,875	NN Group N.V.	2,336	92,876
Toyota Industries Corp.	1,200	55,260	NXP Semiconductors N.V.	2,596	190,235
Toyota Motor Corp.	17,468	1,011,163	QIAGEN N.V.*	1,662	56,792
Toyota Tsusho Corp.	1,600	47,012	Randstad N.V.	923	42,320
Trend Micro, Inc.*	900	48,632	Royal Dutch Shell PLC, A Shares	35,196	1,035,918
Tsuruha Holdings, Inc.	300	25,690	Royal Dutch Shell PLC, B Shares	28,690	857,759
Unicharm Corp.	3,000	97,026	Unilever N.V.	11,630	630,024
United Urban Investment Corp.	21	32,523	Wolters Kluwer N.V.	2,186	128,553
USS Co., Ltd.	1,500	25,168			5,649,310
Welcia Holdings Co. Ltd.	400	18,080	New Zealand — 0.2%		
West Japan Railway Co.	1,300	91,847	a2 Milk Co. Ltd.*	5,597	42,048
Yahoo Japan Corp.	21,700	53,984	Auckland International Airport Ltd.	8,075	38,973
Yakult Honsha Co., Ltd.	900	63,003	Fisher & Paykel Healthcare Corp. Ltd.	4,362	38,118
Yamada Denki Co., Ltd.	5,300	25,454	Fletcher Building Ltd.*	5,870	19,246
Yamaguchi Financial Group, Inc.	1,300	12,426	Meridian Energy Ltd.	7,526	17,221
Yamaha Corp.	1,000	42,539	Ryman Healthcare Ltd.	2,831	20,431
Yamaha Motor Co., Ltd.	2,100	41,000	Spark New Zealand Ltd.	14,196	39,598
Yamato Holdings Co., Ltd.	2,300	63,058	·		215,635
Yamazaki Baking Co., Ltd.	1,000	20,942			210,000
Yaskawa Electric Corp.	1,800	43,999	Norway — 0.7%		
Yokogawa Electric Corp. ZOZO, Inc.	1,600 1,500	27,620 27,482	Aker BP ASA	827	20,851
2020, IIIC.	1,500		DNB ASA	7,620	122,314
		23,122,105	Equinor ASA	9,013	191,185
Jersey — 0.1%			Gjensidige Forsikring ASA	1,418	22,183
Ferguson PLC	1,737	110,991	Mowi ASA	2,950	62,179
	, -		Norsk Hydro ASA	10,203	46,230
Luxembourg — 0.3%	5.460	406.070	Orkla ASA	6,430	50,346
ArcelorMittal	5,168	106,979	Schibsted ASA, B Shares	698	21,233
Aroundtown S.A.	5,880	48,780	Telenor ASA	5,795	112,541
Eurofins Scientific S.E.	87	32,493	Yara International ASA	1,259	48,534
Millicom International Cellular S.A.	489	30,942			697,596
RTL Group S.A. SES S.A.	294 2,712	15,756	Portugal — 0.2%		
Tenaris S.A.	2,712 3,478	51,924 37,381	Banco Espirito Santo S.A.*	27,017	0
Tellalis S.A.	7,470		EDP - Energias de Portugal S.A.	18,562	64,935
		324,255	Galp Energia SGPS S.A.	3,702	58,291
Macau — 0.0%			Jeronimo Martins SGPS S.A.	2,107	24,969
Wynn Macau Ltd.	12,400	26,993			148,195
Netherlands — 5.7%			Singapore — 1.4%		
ABN AMRO Group N.V.144A @	3,103	73,019	Ascendas Real Estate Investment Trust	19,362	36,540
Aegon N.V.	14,103	66,053	CapitaLand Commercial Trust	18,656	23,962
AerCap Holdings N.V.*	913	36,155	CapitaLand Ltd.	18,600	42,416
Airbus S.E.	4,418	421,212	CapitaLand Mall Trust	21,700	35,985
Akzo Nobel N.V.	1,909	153,740	City Developments Ltd.	3,000	17,885
ASML Holding N.V.	3,087	483,609	ComfortDelGro Corp. Ltd.	15,200	24,009
CNH Industrial N.V.	7,476	67,548	DBS Group Holdings Ltd.	13,810	240,154
EXOR N.V.	848	46,036	Genting Singapore Ltd.	46,800	33,500
Heineken Holding N.V.	885	74,771	Golden Agri-Resources Ltd.*	65,000	11,670
Heineken N.V.	1,934	170,940	Jardine Cycle & Carriage Ltd.	611	15,818
ING Groep N.V.	29,578	318,159	Jardine Matheson Holdings Ltd.	1,600	111,406

	Number of Shares		Value†		Number of Shares		Value†
COMMON STOCKS — (continued)			<del></del>				
Singapore — (continued)				Sweden — (continued)			
Keppel Corp. Ltd.	11,600	\$	50,358	Investor AB, B Shares	3,449	\$	146,563
Oversea-Chinese Banking Corp. Ltd.	24,133		199,618	Kinnevik AB, B Shares	1,832		44,333
SATS Ltd.	5,300		18,153	L E Lundbergforetagen AB, B Shares	602		17,778
Sembcorp Industries Ltd.	9,000		16,768	Lundin Petroleum AB	1,488		37,161
Singapore Airlines Ltd.	4,000		27,634	Sandvik AB	8,817		126,332
Singapore Exchange Ltd.	6,000		31,445	Securitas AB, B Shares Skandinaviska Enskilda Banken AB, A Shares	2,230		35,925 123,786
Singapore Press Holdings Ltd.	12,400		21,368	Skanska AB, B Shares	12,734 2,417		38,540
Singapore Technologies Engineering Ltd.	12,000		30,762	SKF AB, B Shares	2,667		40,535
Singapore Telecommunications Ltd. Suntec Real Estate Investment Trust	63,200 16,000		136,021 20,871	Svenska Handelsbanken AB, A Shares	11,598		129,036
United Overseas Bank Ltd.	10,337		186,996	Swedbank AB, A Shares	6,908		154,402
UOL Group Ltd.	4,307		19,588	Swedish Match AB	1,295		50,981
Venture Corp. Ltd.	2,100		21,561	Tele2 AB, B Shares	3,797		48,426
Wilmar International Ltd.	12,500		28,626	Telefonaktiebolaget LM Ericsson, B Shares	23,294		206,198
The state of the s	.2,500	_	1,403,114	Telia Co AB	22,078		105,023
		_	1,405,114	Volvo AB, B Shares	11,928	_	156,186
Spain — 2.9%							2,341,449
ACS Actividades de Construccion y				Switzerland — 8.9%			
Servicios S.A.	1,946		75,324	ABB Ltd.	14,109		269,427
Aena SME S.A.144A @	527		81,881	Adecco Group AG	1,232		57,907
Amadeus IT Group S.A.	3,314		230,580	Baloise Holding AG	370		51,083
Banco Bilbao Vizcaya Argentaria S.A.	50,302		267,195	Barry Callebaut AG	17		26,531
Banco de Sabadell S.A.	40,310		46,124	Chocoladefabriken Lindt & Spruengli AG	1		74,632
Banco Santander S.A. Bankia S.A.	124,028		563,211	Chocoladefabriken Lindt & Spruengli AG,			
Bankinter S.A.	9,428 4,820		27,585 38,676	Participation Certificates	8		49,711
CaixaBank S.A.	28,028		101,502	Cie Financiere Richemont S.A.	3,965		255,693
Enagas S.A.	1,740		47,036	Clariant AG*	1,425		26,280
Endesa S.A.	2,463		56,799	Coca-Cola HBC AG*	1,625		50,859
Ferrovial S.A.	3,996		80,930	Credit Suisse Group AG*	19,556		213,780
Grifols S.A.	2,111		55,418	Dufry AG*	255		24,282
Iberdrola S.A.	45,364		364,268	EMS-Chemie Holding AG Geberit AG	65 291		30,948 113,321
Industria de Diseno Textil S.A.	8,378		213,846	Givaudan S.A.	71		164,626
Mapfre S.A.	8,177		21,717	Glencore PLC*	88,826		330,261
Naturgy Energy Group S.A.	2,579		65,792	Julius Baer Group Ltd.*	1,680		59,869
Red Electrica Corp. S.A.	3,066		68,373	Kuehne + Nagel International AG	402		51,748
Repsol S.A.	10,160		163,343	LafargeHolcim Ltd.*	3,769		155,541
Siemens Gamesa Renewable Energy S.A.*	1,855		22,585	Lonza Group AG*	560		145,575
Telefonica S.A.	35,233	_	296,571	Nestle S.A.	23,294		1,890,606
			2,888,756	Novartis AG	16,521		1,414,929
Sweden — 2.4%				Pargesa Holding S.A.	272		19,617
Alfa Laval AB	2,088		44,886	Partners Group Holding AG	130		79,085
Assa Abloy AB, B Shares	7,608		136,235	Roche Holding AG	5,354		1,329,178
Atlas Copco AB, A Shares	5,080		121,199	Schindler Holding AC Participation	145		28,182
Atlas Copco AB, B Shares	2,942		64,465	Schindler Holding AG, Participation Certificates	304		60,360
Boliden AB	1,973		42,753	SGS S.A.	40		90,041
Electrolux AB, B Shares	1,720		36,255	Sika AG	960		121,943
Epiroc AB, A Shares*	5,080		48,283	Sonova Holding AG	439		72,192
Epiroc AB, B Shares*	2,942		26,261	STMicroelectronics N.V.	5,335		75,616
Essity AB, B Shares	4,611		113,345	Straumann Holding AG	74		46,736
Hennes & Mauritz AB, B Shares	6,503		92,480	Swiss Life Holding AG*	251		96,878
Hexagon AB, B Shares	1,938		89,589	Swiss Prime Site AG*	579		46,900
Husqvarna AB, B Shares	2,834		21,039	Swiss Re AG	2,382		219,145
ICA Gruppen AB	521		18,612	Swisscom AG	202		96,551
Industrivarden AB, C Shares	1,227		24,842	Temenos AG*	461		55,395

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — (continued)		· · · · · · · · · · · · · · · · · · ·			
Switzerland — (continued)		_	United Kingdom — (continued)		
The Swatch Group AG	234	\$ 68,295	John Wood Group PLC	5,233	\$ 33,669
The Swatch Group AG, Registered Shares	425	24,583	Johnson Matthey PLC	1,520	54,273
UBS Group AG*	29,486	367,786	Kingfisher PLC	16,836	44,267
Vifor Pharma AG	334	36,344	Land Securities Group PLC	5,379	55,231
Zurich Insurance Group AG	1,150	342,802	Legal & General Group PLC	46,330	136,505
		8,735,238	Lloyds Banking Group PLC	554,223	365,333
			London Stock Exchange Group PLC	2,325	120,622
United Kingdom — 13.6%	7.507	74064	Marks & Spencer Group PLC	12,979	40,707
3i Group PLC	7,597	74,961	Meggitt PLC	5,739	34,474
Admiral Group PLC	1,518	39,610	Melrose Industries PLC	36,991	77,278
Anglo American PLC	8,060	180,227	Merlin Entertainments PLC144A @	5,527	22,388
Antofagasta PLC	2,581	25,814	Micro Focus International PLC	3,425	60,001
Ashtead Group PLC	3,679	76,742	Mondi PLC	2,860	59,567
Associated British Foods PLC	2,750	71,675	National Grid PLC	25,663	251,069
AstraZeneca PLC	9,711	724,887	Next PLC	1,027	52,292
Auto Trader Group PLC144A @ Aviva PLC	6,702	38,894	NMC Health PLC	796	27,781
	30,574	146,327	Pearson PLC Persimmon PLC	5,773	69,160
Babcock International Group PLC	1,759	10,971	Prudential PLC	2,313 19,917	56,960 355,647
BAE Systems PLC Barclays PLC	24,719 129,742	144,578 248,232	Reckitt Benckiser Group PLC	5,080	389,008
Barratt Developments PLC	7,726	45,574	RELX PLC	7,932	163,561
Berkeley Group Holdings PLC	1,009	44,752	RELX PLC	7,544	155,220
BP PLC	151,928	960,441	Rio Tinto PLC	8,975	429,834
British American Tobacco PLC	14,728	468,631	Rolls-Royce Holdings PLC*(1)	592,250	755
British American Tobacco PLC ADR	2,842	90,546	Rolls-Royce Holdings PLC*	12,875	135,638
BT Group PLC	63,070	191,770	Royal Bank of Scotland Group PLC	36,711	101,838
Bunzl PLC	2,529	76,373	Royal Mail PLC	7,054	24,484
Burberry Group PLC	3,173	69,676	RSA Insurance Group PLC	7,501	49,227
Carnival PLC	1,402	67,327	Schroders PLC	960	29,898
Centrica PLC	43,976	75,857	Segro PLC	7,465	56,041
Coca-Cola European Partners PLC	1,676	77,231	Severn Trent PLC	1,743	40,404
Compass Group PLC	11,986	252,243	Smith & Nephew PLC	6,827	127,792
ConvaTec Group PLC144A @	9,301	16,475	Smiths Group PLC	2,951	51,374
Croda International PLC	1,046	62,468	SSE PLC	7,890	108,958
DCC PLC	683	52,099	St. James's Place PLC	4,100	49,380
Diageo PLC	18,873	674,415	Standard Chartered PLC	21,440	166,625
Direct Line Insurance Group PLC	9,937	40,393	Standard Life Aberdeen PLC	18,172	59,501
easyJet PLC	1,334	18,797	Taylor Wimpey PLC	25,341	44,064
Fiat Chrysler Automobiles N.V.*	8,001	115,362	Tesco PLC	74,311	180,216
Fresnillo PLC	1,565	17,196	The British Land Co. PLC	6,815	46,344
G4S PLC	12,521	31,607	The Sage Group PLC	7,752	59,454
GlaxoSmithKline PLC	38,018	724,548	The Weir Group PLC	1,767	29,260
Hammerson PLC	6,517	27,436	Unilever PLC	8,601	451,577
Hargreaves Lansdown PLC	2,059	48,562	United Utilities Group PLC	4,874	45,828
HSBC Holdings PLC	151,388	1,248,911	Vodafone Group PLC	204,986	398,552
Imperial Brands PLC	7,183	218,017	Whitbread PLC	1,345	78,544
Informa PLC	9,584	76,928	Wm Morrison Supermarkets PLC	16,162	43,937
InterContinental Hotels Group PLC	1,350	73,025	WPP PLC	9,426	102,583
International Consolidated Airlines Group					13,415,348
S.A. (London Main Market Exchange)	1,308	10,317	TOTAL COMMON STOCKS		
International Consolidated Airlines Group			(Cost \$82,854,353)		94,795,562
S.A. (Spanish Stock Exchange)	3,606	28,588	( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( ( (		בטנינל זידר
Intertek Group PLC	1,257	76,932	PREFERRED STOCKS — 0.5%		
Investec PLC	4,543	25,540			
ITV PLC	27,237	43,352	Germany — 0.5%	45.	22.251
J. Sainsbury PLC	12,992	43,920	Bayerische Motoren Werke AG	454	32,376

	Number of Shares	Value†
PREFERRED STOCKS — (continued)		
Germany — (continued)		
FUCHS PETROLUB S.E.	492	\$ 20,340
Henkel AG & Co. KGaA	1,385	151,283
Porsche Automobil Holding S.E.	1,203	70,751
Sartorius AG	272	33,852
Volkswagen AG	1,404	223,876
TOTAL PREFERRED STOCKS		
(Cost \$440,255)		532,478
RIGHTS — 0.0%		
Spain — 0.0%		
Repsol S.A.*		
(Cost \$4,743)	10,160	4,656
SHORT-TERM INVESTMENTS — 1.6%		
BlackRock Liquidity Funds FedFund Portfolio -		
Institutional Shares		
(Cost \$1,533,435)	1,533,435	1,533,435
TOTAL INVESTMENTS — 98.4%		
(Cost \$84,832,786)		96,866,131
Other Assets & Liabilities — 1.6%		1,605,300
TOTAL NET ASSETS — 100.0%		\$98,471,431

<sup>(1)</sup> The value of this security was determined using significant unobservable inputs and is reported as a Level 3 security in the Valuation Hierarchy table located at the end of the Schedule of Investments.

REIT — Real Estate Investment Trust.

COMMON STOCKS	% of Market	
INDUSTRY DIVERSIFICATION	% of Market Value	Value†
Advertising	0.3%	\$ 304,847
Aerospace & Defense	1.5%	1,378,416
Agriculture	1.1%	1,065,688
Airlines	0.2%	201,879
Apparel	1.6%	1,529,286
Auto Manufacturers	3.2%	3,031,962
Auto Parts & Equipment	1.1%	1,061,721
Banks	11.6%	11,038,614
Beverages	2.4%	2,227,898
Biotechnology	0.7%	630,861
Building & Real Estate	0.2%	146,598
Building Materials	1.3%	1,262,142

COMMON STOCKS INDUSTRY DIVERSIFICATION	% of Market Value	Value†
Building-Maintenance Service	-+	\$ 36,592
Chemicals	3.2%	3,014,476
Commercial Services	2.1%	1,982,112
Computers	0.6%	596,228
Cosmetics & Personal Care	2.5%	2,403,064
Distribution & Wholesale	1.2%	1,109,202
Diversified	+	36,540
Diversified Financial Services	2.1%	1,999,825
Diversified Operations	0.2%	202,263
Electric	2.6%	2,491,148
Electrical Components & Equipment	1.1%	1,054,352
Electronics	1.5%	1,427,194
Energy-Alternate Sources	0.2%	209,194
Engineering & Construction	1.3%	1,182,901
Entertainment	0.5%	426,391
Environmental Control	-+	19,369
Food	4.8%	4,499,297
Food Service	0.1%	71,584
Forest Products & Paper	0.3%	291,470
Gas	0.9%	813,733
Hand & Machine Tools	0.5%	510,694
Healthcare Products	1.4%	1,362,938
Healthcare Services	0.5%	449,921
Holding Companies	0.4%	372,574
Home Builders	0.3%	311,384
Home Furnishings	0.8%	712,103
Hotels & Resorts	0.2%	151,883
Household Products & Wares	0.5%	488,176
Insurance	5.6%	5,272,288
Internet	0.5%	514,649
Investment Companies	0.3%	279,062
Iron & Steel	0.5%	453,310
Leisure Time	0.3%	315,971
Lodging	0.4%	414,625
Machinery - Construction & Mining	0.8%	782,564
Machinery - Diversified Media	0.9%	890,502
	0.7%	616,131
Metal Fabricate/Hardware	0.3%	295,648
Mining Miscellaneous Manufacturing	2.6%	2,435,078
Mixed Industrial/Office	1.1% 0.3%	1,019,162
•		278,300
Office & Business Equipment Oil & Gas	0.3% 5.7%	320,263
Packaging and Containers	0.1%	5,434,913 107,588
Pharmaceuticals	8.8%	8,353,444
Pipelines	0.1%	81,994
Real Estate	1.9%	1,792,961
Real Estate Investment Trusts	1.2%	1,103,227
	0.2%	
Real Estate Management Services Retail	2.3%	169,046 2,140,905
Semiconductors	1.2%	1,178,815
Shipbuilding	—%	
Software	—, 1.6%	17,458 1,533,574
Telecommunications	4.6%	4,313,161
Textiles	0.1%	133,491
Toys, Games & Hobbies	0.1%	306,334
Transportation	2.0%	1,851,377
Transportation	2.0%	1,00,1,0//

<sup>†</sup> See Security Valuation Note.

Non-income producing security.

<sup>144</sup>A @ Security exempt from registration under Rule 144A of the Securities Act of 1933, as amended. At December 31, 2018, the aggregate value of Rule 144A securities was \$624,855, which represents 0.6% of the Fund's net assets.

PLC — Public Limited Company.

ADR — American Depository Receipt.

COMMON STOCKS INDUSTRY DIVERSIFICATION	% of Market Value		Value†
Venture Capital	0.1%	\$	74,961
Water	0.2%		208,240
	100.0%	\$9	4,795,562

<sup>+</sup> Less than 0.005%.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follow (See Security Valuation Note):

	ASSETS TABLE						
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input			
COMMON STOCKS							
Australia	\$ 6,932,608	\$ 70,734	\$ 6,861,874	\$ —			
Austria	228,499	_	228,499	· —			
Belgium	905,216	_	905,216				
Bermuda	62,329	_	62,329				
China	141,626	28,052	113,574	_			
Denmark	1,670,618	, <u> </u>	1,670,618				
Finland	1,194,238	_	1,194,238	_			
France	9,798,288	101,847	9,696,441	_			
Germany	7,828,597	80,136	7,748,461	_			
Hong Kong	3,348,911	34,659	3,314,252	_			
Ireland	1,130,151	12,342	1,117,809	_			
Isle of Man	35,610	· —	35,610	_			
Israel	502,028	120,719	381,309	_			
Italy	1,937,858	· —	1,937,858	_			
Japan	23,122,105	_	23,122,105	_			
Jersey	110,991	_	110,991	_			
Luxembourg	324,255	_	324,255	_			
Macau	26,993	_	26,993	_			
Netherlands	5,649,310	226,390	5,422,920	_			
New Zealand	215,635	_	215,635	_			
Norway	697,596	_	697,596	_			
Portugal	148,195	_	148,195	_			
Singapore	1,403,114	_	1,403,114	_			
Spain	2,888,756	_	2,888,756				
Sweden	2,341,449	_	2,341,449	_			
Switzerland	8,735,238	_	8,735,238	_			
United Kingdom	13,415,348	90,546	13,324,047	755			
TOTAL COMMON							
STOCKS	94,795,562	765,425	94,029,382	755			
PREFERRED STOCKS							
Germany	532,478	_	532,478				
RIGHTS	4,656	4,656	_	_			
SHORT-TERM							
INVESTMENTS	1,533,435	1,533,435	_	_			
TOTAL							
INVESTMENTS	\$96,866,131	\$2,303,516	\$94,561,860	\$755			
-							

LIABILITIES TABLE							
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input			
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup>							
Futures Contracts	\$(69,281)	\$(69,281)	\$ <del></del>	\$—			
TOTAL LIABILITIES — OTHER FINANCIAL							
INSTRUMENTS	\$(69,281)	\$(69,281)	\$ <del></del>	\$ <del></del>			

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as future contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

Following is a reconciliation of Level 3 investments for which significant unobservable inputs were used to determine fair value:

	Investments in Securities (Market Value)
Balance as of 12/31/2017	\$ —
Change in Appreciation/(Depreciation)	(8)
Purchases	763
Balance as of 12/31/2018	\$755 ***********************************

It Is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period.

An amount of \$2,102,440 was transferred from Level 1 into Level 2 at 12/31/18 as the Fund utilized third-party vendor modeling tools to reflect any significant market movements between the time at which the Fund valued its securities and the earlier closing of foreign markets.

An amount of \$75,719 was transferred from Level 2 into Level 1 at 12/31/18 as a result of using quoted prices in active market for such foreign securities.

The Fund did not have any transfers in and transfers out of Level 3 fair value hierarchy during the reporting period.

The accompanying notes are an integral part of these financial statements.

#### **Futures Contracts:**

Туре	Futures Contract	Expiration Date	Numbers of Contracts	Units per Contract	Closing Price	Notional Value	Unrealized Appreciation	Unrealized Depreciation
Buy/Long	E-Mini MSCI EAFE Index	3/29/2019	37	50	\$1,716	\$3,174,600	<u>\$—</u>	\$(69,281)
Total							<u>\$—</u>	<u>\$(69,281</u> )

## Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 International Equity Fund

	Number of Shares	Value†		Number of Shares	Value†
COMMON STOCKS — 94.9%					
Belgium — 1.3% Anheuser-Busch InBev N.V.	59,388	\$ 3,912,427	Singapore — 2.0% United Overseas Bank Ltd.	330,600	\$ 5,980,550
Brazil — 1.0%			Spain — 3.7%		
Ambev S.A. ADR	713,564	2,797,171	Grifols S.A.	227,411	5,969,955
Canada — 8.2%			Industria de Diseno Textil S.A.	193,654	4,942,963
Alimentation Couche-Tard, Inc., Class B	193,719	9,636,286			10,912,918
Canadian National Railway Co.	76,025	5,630,594	Sweden — 1.0%		
Constellation Software, Inc.	14,302	9,154,663	Svenska Handelsbanken AB, A Shares	265,896	2,958,273
		24,421,543	Switzerland — 5.2%		
China — 3.3%			Nestle S.A.	159,944	12,981,501
Alibaba Group Holding Ltd. ADR*	22,853	3,132,460	UBS Group AG*	204,396	2,549,481
Tencent Holdings Ltd.	165,882	6,648,609			15,530,982
		9,781,069	Taiwan — 1.3%		
France — 11.4%			Taiwan Semiconductor Manufacturing Co.		
Air Liquide S.A.	36,962	4,589,785	Ltd. ADR	106,493	3,930,657
L'Oreal S.A.	23,624	5,405,753	United Kingdom 17.5%		
LVMH Moet Hennessy Louis Vuitton S.E.	16,050	4,699,058	United Kingdom — 17.5% Bunzl PLC	293,672	8,868,549
Safran S.A. Teleperformance	61,633	7,391,961	DCC PLC	60,935	4,648,140
Vinci S.A.	46,539 53,894	7,444,844 4,431,817	Diageo PLC	232,233	8,298,708
VIIICI SII G	<i>JJ</i> ,0 <i>J</i> 1		Domino's Pizza Group PLC	1,358,824	4,038,481
		33,963,218	London Stock Exchange Group PLC	61,969	3,214,986
Germany — 5.9%			Reckitt Benckiser Group PLC	87,162	6,674,546
Fresenius S.E. & Co. KGaA	132,087	6,384,315	RELX PLC Rentokil Initial PLC	585,212 978,024	12,040,895
HeidelbergCement AG SAP S.E.	63,450 72,337	3,889,350 7,179,431	Rentokii iliitiai PLC	970,024	4,207,457
SAF S.L.	72,337				51,991,762
		17,453,096	United States — 6.0%		
Hong Kong — 1.6%			Booking Holdings, Inc.*	3,739	6,440,128
Techtronic Industries Co., Ltd.	917,474	4,868,729	Mastercard, Inc., Class A Philip Morris International, Inc.	37,143	7,007,027
India — 8.7%			Visa, Inc., Class A	21,949 21,107	1,465,315 2,784,858
HDFC Bank Ltd.	463,409	14,096,831	visa, me., class //	21,107	
Housing Development Finance Corp. Ltd.	238,990	6,733,374			17,697,328
Power Grid Corp. of India Ltd.	1,770,709	5,036,347	TOTAL COMMON STOCKS		
		25,866,552	(Cost \$274,085,107)		281,632,891
Ireland — 3.9%			SHORT-TERM INVESTMENTS — 4.5%		
Kingspan Group PLC	71,804	3,078,058			
Medtronic PLC	42,110	3,830,325	BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares		
Paddy Power Betfair PLC	55,882	4,589,298	(Cost \$13,439,232)	13,439,232	13,439,232
		11,497,681	• • • • •	.,, .,,,,,,	
Japan — 4.3%			TOTAL INVESTMENTS — 99.4%		205 072 122
Keyence Corp.	14,778	7,469,479	(Cost \$287,524,339)		295,072,123
Shimano, Inc.	36,500	5,145,308	Other Assets & Liabilities — 0.6%		1,820,295
		12,614,787	TOTAL NET ASSETS — 100.0%		\$296,892,418
Mexico — 1.2%					
Wal-Mart de Mexico S.A.B. de C.V.	1,409,079	3,583,689	+ Soo Socurity Valuation Note		
Netherlands — 7.4%			<ul><li>† See Security Valuation Note.</li><li>* Non-income producing security.</li></ul>		
Heineken N.V.	87,798	7,760,193	ADR — American Depository Receipt.		
Unilever N.V.	260,470	14,110,266	PLC — Public Limited Company.		
	,	21,870,459			
		2 .,0,0,100			

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 International Equity Fund

COMMON STOCKS INDUSTRY DIVERSIFICATION	% of Market Value	Value†
Aerospace & Defense	2.6%	\$ 7,391,961
Agriculture	0.5%	1,465,315
Apparel	1.7%	4,699,058
Banks	9.1%	25,585,135
Beverages	8.1%	22,768,499
Building Materials	2.5%	6,967,408
Chemicals	1.6%	4,589,785
Commercial Services	5.8%	16,248,352
Computers	2.6%	7,444,844
Cosmetics & Personal Care	6.9%	19,516,019
Distribution & Wholesale	3.1%	8,868,549
Diversified Financial Services	7.0%	19,740,245
Electric	1.8%	5,036,347
Electronics	2.7%	7,469,479
Engineering & Construction	1.6%	4,431,817
Entertainment	1.6%	4,589,298
Food	4.6%	12,981,501
Hand & Machine Tools	1.7%	4,868,729
Healthcare Products	1.4%	3,830,325
Healthcare Services	2.3%	6,384,315
Household Products & Wares	2.4%	6,674,546
Internet	5.8%	16,221,197
Leisure Time	1.8%	5,145,308
Oil & Gas	1.6%	4,648,140
Pharmaceuticals	2.1%	5,969,955
Retail	7.9%	22,201,419
Semiconductors	1.4%	3,930,657
Software	5.8%	16,334,094
Transportation	2.0%	5,630,594
	100.0%	\$281,632,891

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE								
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input				
COMMON STOCKS								
Belgium	\$ 3,912,42	7\$ —	\$ 3,912,427	\$—				
Brazil	2,797,17	1 2,797,171	_	_				
Canada	24,421,54	3 24,421,543		_				
China	9,781,06	9 3,132,460	6,648,609	_				
France	33,963,21	8 —	33,963,218	_				
Germany	17,453,09	6 <u> </u>	17,453,096	_				
Hong Kong	4,868,72	9 —	4,868,729	_				
India	25,866,55	2 —	25,866,552	_				
Ireland	11,497,68	1 3,830,325	7,667,356	_				
Japan	12,614,78	7 —	12,614,787	_				
Mexico	3,583,68	9 3,583,689	_	_				
Netherlands	21,870,45	9 —	21,870,459	_				
Singapore	5,980,55	0 —	5,980,550	_				
Spain	10,912,91	8 —	10,912,918	_				
Sweden	2,958,27	3 —	2,958,273	_				
Switzerland	15,530,98	2 —	15,530,982	_				
Taiwan	3,930,65	7 3,930,657	_	_				
United Kingdom	51,991,76	2 —	51,991,762	_				
United States	17,697,32	8 17,697,328	_	· –				
TOTAL COMMON								
STOCKS	281,632,89	1 59,393,173	222,239,718	_				
SHORT-TERM								
INVESTMENTS	13,439,23	2 13,439,232		<del>-</del>				
TOTAL INVESTMENTS	£205 072 12	3\$72,832,405	£777 720 740	٤				
IINVLSTIVIENTS	\$273,072,12	J\$/2,0J2, <del>4</del> UJ	\$222,239,710	\$—				

It Is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period.

An amount of \$10,691,876 was transferred from Level 1 into Level 2 at 12/31/18 as the Fund utilized third-party vendor modeling tools to reflect any significant market movements between the time at which the Fund valued its securities and the earlier closing of foreign markets.

The Fund did not have any transfers in and transfers out of Level 3 fair value hierarchy during the reporting period.

	Number of Shares	Value†		Number of Shares		Value†
COMMON STOCKS — 91.6%						
Argentina — 0.3%			India — 10.5%			
Grupo Financiero Galicia S.A. ADR	17,711	\$ 488,292	Ashok Leyland Ltd.	1,035,981	\$	1,519,534
Austria — 0.7%			Eicher Motors Ltd.	3,294		1,091,837
Erste Group Bank AG*	30,301	1,004,708	Housing Development Finance Corp. Ltd.	50,235		1,415,336
·	- /-		ICICI Bank Ltd.	193,242		997,152
Brazil — 4.5% Ambev S.A.	E24 400	2 080 000	ICICI Bank Ltd. ADR	67,400		693,546
B3 S.A.—Brasil Bolsa Balcao	524,408 226,208	2,080,990 1,564,765	IndusInd Bank Ltd.	61,920		1,417,827
Lojas Renner S.A.	141,482	1,547,787	L&T Finance Holdings Ltd.  Marico Ltd.	277,723 349,171		606,301 1,866,680
Petroleo Brasileiro S.A.	222,413	1,457,599	Maruti Suzuki India Ltd.	16,443		1,756,980
	,	6,651,141	Shree Cement Ltd.	6,749		1,665,019
			Tata Consultancy Services Ltd.	42,681		1,157,289
Chile — 1.9%			Zee Entertainment Enterprises Ltd.	176,738		1,205,572
Banco Santander Chile	9,888,550	736,512		,,,,,,	_	
Banco Santander Chile ADR	6,348	189,805			_	15,393,073
S.A.C.I. Falabella	259,984	1,906,649	Indonesia — 4.8%			
		2,832,966	Astra International Tbk PT	2,586,000		1,481,498
China — 16.8%			Bank Central Asia Tbk PT	630,000		1,139,323
Alibaba Group Holding Ltd. ADR*	25,247	3,460,606	Bank Mandiri Persero Tbk PT	2,105,100		1,079,855
Anhui Conch Cement Co., Ltd., Class H	197,000	952,647	Bank Rakyat Indonesia Tbk PT	2,730,200		695,542
Baidu, Inc. ADR*	5,200	824,720	Telekomunikasi Indonesia Persero Tbk PT	5,235,700		1,368,787
Bank of China Ltd., Class H	6,805,000	2,933,652	Unilever Indonesia Tbk PT	388,400	_	1,228,751
China Construction Bank Corp., Class H	5,010,930	4,103,217				6,993,756
China Life Insurance Co. Ltd., Class H	250,000	528,686	Malaysia — 2.8%			
China Pacific Insurance Group Co. Ltd.,			Genting Malaysia Bhd	177,000		129,241
Class H	384,400	1,242,176	Malayan Banking Bhd	511,601		1,175,228
New Oriental Education & Technology			Malaysia Airports Holdings Bhd	475,200		962,597
Group, Inc. ADR*	14,459	792,498	Public Bank Bhd	167,300		1,001,584
PetroChina Co. Ltd., Class H	1,562,000	969,215	Sime Darby Plantation Bhd	801,100		920,767
Shanghai Pharmaceuticals Holding Co. Ltd., Class H	192 500	272 602	,			4,189,417
Shenzhou International Group Holdings Ltd.	183,500 147,000	372,602 1,670,780			_	7, 103, 17
Sinopharm Group Co. Ltd., Class H	93,200	392,396	Mexico — 5.0%			
TAL Education Group ADR*	20,572	548,861	Alsea S.A.B.de C.V.	334,557		872,324
Tencent Holdings Ltd.	146,000	5,851,731	Fomento Economico Mexicano S.A.B. de			
	,		C.V. ADR	26,699		2,297,449
		24,643,787	Grupo Financiero Banorte S.A.B. de C.V.,	225.020		4 500 530
Egypt — 0.7%			Series O	325,828		1,590,529
Commercial International Bank Egypt S.A.E.	237,914	982,394	Infraestructura Energetica Nova S.A.B. de C.V.	157.404		E8E 200
Germany — 1.0%			Val-Mart de Mexico S.A.B. de C.V.	157,494 804,967		585,200 2,047,261
adidas AG	6,722	1,404,826	Wal-Mai t de Mexico 3.A.B. de C.V.	004,907	_	
	,				_	7,392,763
Hong Kong — 4.7%	425.000	1 252 512	Peru — 2.2%			
China Mengniu Dairy Co. Ltd.* China Mobile Ltd.	435,000 210,500	1,353,512 2,036,924	Cia de Minas Buenaventura S.A.A. ADR	116,499		1,889,614
China Overseas Land & Investment Ltd.	238,000	820,579	Credicorp Ltd.	6,423		1,423,786
China Resources Land Ltd.	132,000	507,761				3,313,400
China Resources Power Holdings Co. Ltd.	234,000	450,084			_	3,3 .3, 100
China Unicom Hong Kong Ltd.	806,000	858,718	Philippines — 1.5%			== 4 00=
CSPC Pharmaceutical Group Ltd.	436,000	625,865	Ayala Corp.	34,620		591,883
Sino Biopharmaceutical Ltd.	387,000	254,758	Ayala Land, Inc.	501,600		387,699
		6,908,201	SM Investments Corp.	69,210	_	1,207,418
11					_	2,187,000
Hungary — 1.7%	E2 442	2 407 240	Poland — 3.1%			
OTP Bank NYRT*	52,142	2,107,219	CCC S.A.	15,377		797,779
Richter Gedeon NYRT	22,513	436,071	LPP S.A.	553		1,162,671
		2,543,290				

	Number of Shares	Value†
COMMON STOCKS — (continued)		
Poland — (continued) Powszechna Kasa Oszczednosci Bank Polski		
S.A.	109,297	\$ 1,154,566
Santander Bank Polska S.A.*	14,349	1,379,172
		4,494,188
Portugal — 1.0%		
Jeronimo Martins SGPS S.A.	121,147	1,435,655
Russia — 4.2%		
MMC Norilsk Nickel PJSC ADR	81,102	1,527,962
Sberbank of Russia PJSC ADR	159,502	1,746,733
X5 Retail Group N.V. GDR	58,958	1,462,761
Yandex N.V., Class A*	51,462	1,407,486
		6,144,942
South Africa 5 0%		
South Africa — 5.9% AVI Ltd.	165,809	1,175,922
Capitec Bank Holdings Ltd.	22,684	1,757,866
Clicks Group Ltd.	100,698	1,338,721
Reunert Ltd.	169,878	837,379
Sanlam Ltd.	344,808	1,909,958
The Bidvest Group Ltd.	120,647	1,733,052
, , , , , , , , , , , , , , , , , , ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8,752,898
		0,7 72,090
South Korea — 6.5%		
BGF retail Co. Ltd.	1,897	346,261
E-MART, Inc.	2,303	376,104
GS Retail Co. Ltd.	9,531	345,403
KB Financial Group, Inc.*	9,541	398,020
LG Household & Health Care Ltd.	902	891,461
NAVER Corp. S-Oil Corp.	9,005 6,616	986,911 577,087
Samsung Electronics Co. Ltd.	131,461	4,576,383
Shinhan Financial Group Co., Ltd.*	13,075	463,589
SK Hynix, Inc.*	10,634	579,729
5,,e.	.0,051	
		9,540,948
Taiwan — 8.7%	220.250	642.045
ASE Technology Holding Co. Ltd.*	339,258	642,845
Cathay Financial Holding Co., Ltd.	697,000	1,066,989
CTBC Financial Holding Co. Ltd.	1,278,000	840,584
Hon Hai Precision Industry Co. Ltd.* Largan Precision Co. Ltd.	132,112 4,000	304,047 417,380
MediaTek, Inc.	103,000	766,578
Mega Financial Holding Co. Ltd.	775,000	654,272
Nanya Technology Corp.	109,000	195,199
President Chain Store Corp.	67,000	675,026
Taiwan Cement Corp.	197,000	227,380
Taiwan Semiconductor Manufacturing Co.	21,111	7,2
Ltd. Vanguard International Semiconductor	931,769	6,765,792
Corp.	126,000	244,389
	,,,,,,	12,800,481
The Head 2 400		. 2,000, 101
Thailand — 2.1%  Bangkok Dusit Modical Services PCL Class F	1,027,600	770.060
Bangkok Dusit Medical Services PCL, Class F Central Pattana PCL	260,200	770,069 597,870
CP ALL PCL	238,200	501,997
PTT PCL	852,700	1,208,872
	0,72,700	
		3,078,808

	Number of Shares	Value†
United States — 1.0%		
Samsonite International S.A.144A @	523,800	\$ 1,488,028
TOTAL COMMON STOCKS		
(Cost \$129,871,072)		134,664,962
PREFERRED STOCKS — 5.0%		
Brazil — 4.7%		
Banco Bradesco S.A.	262,770	2,620,411
Itau Unibanco Holding S.A.	297,784	2,727,558
Petroleo Brasileiro S.A.	266,339	1,558,555
		6,906,524
South Korea — 0.3%		
Samsung Electronics Co. Ltd.	13,258	378,829
TOTAL PREFERRED STOCKS		
(Cost \$5,676,401)		7,285,353
SHORT-TERM INVESTMENTS — 4.7%		
BlackRock Liquidity Funds FedFund Portfolio—Institutional Shares		
(Cost \$6,861,218)	6,861,218	6,861,218
TOTAL INVESTMENTS — 101.3%		
(Cost \$142,408,691)		148,811,533
Other Assets & Liabilities — (1.3)%		(1,838,885)
TOTAL NET ASSETS — 100.0%		\$146,972,648

<sup>†</sup> See Security Valuation Note.

GDR — Global Depository Receipt.

ADR — American Depository Receipt.

PCL — Public Company Limited.

COMMON STOCKS	% of Market	
INDUSTRY DIVERSIFICATION	Value	Value†
Agriculture	0.7%	\$ 920,767
Apparel	3.1%	4,238,277
Auto Manufacturers	3.2%	4,368,351
Banks	20.8%	28,040,642
Beverages	3.3%	4,378,439
Building Materials	2.1%	2,845,046
Commercial Services	1.0%	1,341,359
Computers	0.9%	1,157,289
Cosmetics & Personal Care	0.7%	891,461
Distribution & Wholesale	0.6%	837,379
Diversified Financial Services	5.7%	7,700,733
Electric	0.8%	1,035,284

<sup>\*</sup> Non-income producing security.

<sup>144</sup>A @ Security exempt from registration under Rule 144A of the Securities Act of 1933, as amended. At December 31, 2018, the aggregate value of Rule 144A securities was \$1,488,028, which represents 1.0% of the Fund's net assets.

COMMON STOCKS INDUSTRY DIVERSIFICATION	% of Market Value	Value†
Electronics	0.2%	\$ 304,047
Engineering & Construction	0.7%	962,597
Food	3.2%	4,251,928
Healthcare Services	0.6%	770,069
Holding Companies	0.9%	1,175,922
Household Products & Wares	3.4%	4,583,459
Insurance	3.5%	4,747,809
Internet	9.3%	12,531,454
Lodging	0.1%	129,241
Media	0.9%	1,205,572
Mining	2.5%	3,417,576
Miscellaneous Manufacturing	0.3%	417,380
Oil & Gas	3.1%	4,212,773
Pharmaceuticals	1.3%	1,709,090
Real Estate	2.2%	2,905,792
Retail	11.5%	15,549,882
Semiconductors	10.2%	13,770,915
Telecommunications	3.2%	4,264,429
	100.0%	\$ 134,664,962

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ACC	E.	rc	т	Δ	R	1	E

		Total Market /alue at		Level 1 Quoted	Si	Level 2 gnificant bservable	Sign	vel 3 ificant servable
Description	12	/31/2018		Price		Input	In	put
COMMON STOCKS								
Argentina	\$	488,292	\$	488,292	\$	_	ģ	;—
Austria		1,004,708		_		1,004,708		_
Brazil		6,651,141		6,651,141		_		_
Chile		2,832,966		2,832,966		_		_
China	2	4,643,787		5,626,685		19,017,102		_
Egypt		982,394		_		982,394		_
Germany		1,404,826		_		1,404,826		_
Hong Kong		6,908,201		_		6,908,201		_
Hungary		2,543,290		_		2,543,290		_
India	1	5,393,073		693,546		14,699,527		_
Indonesia		6,993,756		_		6,993,756		_
Malaysia		4,189,417		_		4,189,417		_
Mexico		7,392,763		7,392,763		_		_
Peru		3,313,400		3,313,400		_		_
Philippines		2,187,000		_		2,187,000		_
Poland		4,494,188		_		4,494,188		_
Portugal		1,435,655		_		1,435,655		_
Russia		6,144,942		2,935,448		3,209,494		_
South Africa		8,752,898		_		8,752,898		_
South Korea		9,540,948		_		9,540,948		_
Taiwan	1	2,800,481		_		12,800,481		_
Thailand		3,078,808		770,069		2,308,739		_
United States		1,488,028				1,488,028		
TOTAL COMMON								
STOCKS	13	4,664,962	3	0,704,310	1	03,960,652		_

ASSETS TABLE							
Description		Total Market Value at 2/31/2018		Level 1 Quoted Price		Level 2 ignificant bservable Input	Level 3 Significant Unobservable Input
PREFERRED STOCKS Brazil South Korea	\$	6,906,524 378,829	\$	6,906,524 —	\$	— 378,829	\$— —
TOTAL PREFERRED STOCKS		7,285,353		6,906,524		378,829	
SHORT-TERM INVESTMENTS		6,861,218		6,861,218			
TOTAL INVESTMENTS	\$1	48,811,533	\$4	44,472,052	\$1	04,339,481	\$
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup> Forward Foreign Currency Contracts	\$	61,129	\$	_	\$	61,129	\$—
TOTAL ASSETS — OTHER FINANCIAL INSTRUMENTS	\$	61,129	\$	_	\$	61,129	\$—
·							

	LIABILI	TIES TABLE		
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
OTHER FINANCIAL INSTRUMENTS <sup>(1)</sup> Forward Foreign Currency Contracts	\$(308,297)	<b>\$</b> —	\$(308,297)	\$—
TOTAL LIABILITIES — OTHER FINANCIAL INSTRUMENTS	\$(308,297)	\$—	\$(308,297)	\$—

(1) Other financial instruments are derivative instruments not reflected in the value of total investments in securities in the Schedule of Investments such as forward foreign currency contracts which are valued at the unrealized appreciation (depreciation) on the instrument.

It Is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period.

An amount of \$18,243,657 was transferred from Level 1 into Level 2 at 12/31/18 as the Fund utilized third-party vendor modeling tools to reflect any significant market movements between the time at which the Fund valued its securities and the earlier closing of foreign markets.

The Fund did not have any transfers in and transfers out of Level 3 fair value hierarchy during the reporting period.

Open forward foreign currency contracts held by Emerging Markets Equity Fund at December 31, 2018 were as follows:

	Currency	Counterparty	Settlement Date	Foreign Currency Contract	Forward Rate	U.S. Contract Amount	U.S. Contract Value	Unrealized Appreciation	Unrealized Depreciation
Sell	Hong Kong Dollar	<b>UBS Securities</b>	03/01/2019	(181,703,589)	7.81640	\$(23,307,584)	\$(23,246,455)	\$61,129	\$ —
Sell	South African Rand	<b>UBS Securities</b>	01/17/2019	(93,373,843)	14.41775	(6,168,013)	(6,476,310)		(308,297)
	Total							\$61,129	<u>\$(308,297)</u>

# Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Real Estate Securities Fund

	Number of Shares	Value†	
COMMON STOCKS — 0.8%			
Entertainment — 0.8%			Office Property — (continued)
Red Rock Resorts, Inc., Class A			Kilroy Realty Corp.
(Cost \$1,096,566)	46,620	\$ 946,852	VEREIT, Inc.
REAL ESTATE INVESTMENT TRUSTS — 99.4%	3		Destand Malle 4.4%
Apartments — 18.5%			Regional Malls — 1.1%
American Homes 4 Rent, Class A	41,058	815,001	Taubman Centers, Inc.
Apartment Investment & Management Co.,			Storage & Warehousing — 13.1%
Class A	114,881	5,040,978	Americold Realty Trust
Essex Property Trust, Inc.	22,994	5,638,359	Extra Space Storage, Inc.
Invitation Homes, Inc.	124,431	2,498,575	Industrial Logistics Properties Trust
UDR, Inc.	181,903	7,206,997	Iron Mountain, Inc.
		21,199,910	Liberty Property Trust
D. 111			Life Storage, Inc.
Building & Real Estate — 3.2%	26 697	1 577 736	Public Storage
Agree Realty Corp.	26,687	1,577,736	
Realty Income Corp.	32,333	2,038,272	State Combana   F 49/
		3,616,008	Strip Centers — 5.4%
Diversified — 10.1%			Regency Centers Corp. SITE Centers Corp.
American Tower Corp.	7,488	1,184,527	
Cousins Properties, Inc.	70,431	556,405	Urban Edge Properties Weingarten Realty Investors
Digital Realty Trust, Inc.	47,095	5,017,972	Weiligalter Realty Ilivestors
Lamar Advertising Co., Class A	20,476	1,416,529	
Outfront Media, Inc.	54,848	993,846	Telecommunications — 4.5%
SBA Communications Corp.*	14,539	2,353,719	Equinix, Inc.
		11,522,998	TOTAL REAL ESTATE INVESTMENT
Healthcare — 12.0%			(Cost \$112,907,396)
HCP, Inc.	87,748	2,450,802	-
Sabra Health Care REIT, Inc.	65,540	1,080,099	SHORT-TERM INVESTMENTS — 0.9
Ventas, Inc.	39,722	2,327,312	BlackRock Liquidity Funds FedFund
Welltower, Inc.	113,015	7,844,371	Institutional Shares
		13,702,584	(Cost \$1,017,942)
Hotels & Resorts — 8.1%			TOTAL INVESTMENTS — 101.1%
Host Hotels & Resorts, Inc.	57,031	950,707	(Cost \$115,021,904)
Park Hotels & Resorts, Inc. Pebblebrook Hotel Trust	132,896 51,743	3,452,638 1,464,844	Other Assets & Liabilities — (1.1)%
RLJ Lodging Trust	37,712	618,477	TOTAL NET ASSETS — 100.0%
VICI Properties, Inc.	148,265	2,784,417	
vici i roperies, inc.	1 10,200	9,271,083	† See Security Valuation No
			* Non-income producing sec
Industrial — 6.9%	54.054	2 747 227	REIT — Real Estate Investment Tru
CyrusOne, Inc.	51,954	2,747,327	
Prologis, Inc.	87,471	5,136,297	
		7,883,624	
Manufactured Homes — 4.4%			
Equity LifeStyle Properties, Inc.	13,147	1,276,968	
Sun Communities, Inc.	36,669	3,729,604	
		5,006,572	
Office Property — 12.1%		<del></del>	
Boston Properties, Inc.	33,461	3,766,036	
Douglas Emmett, Inc.	38,611	1,317,793	
Hudson Pacific Properties, Inc.	91,668	2,663,872	
	•	•	

	Number of Shares	Value†
Office Proposition (continued)		
Office Property — (continued)	10 119	÷ 2 5/1 /9/
Kilroy Realty Corp.	40,418	\$ 2,541,484
VEREIT, Inc.	497,096	3,554,236
		13,843,421
Regional Malls — 1.1%		
Taubman Centers, Inc.	26,853	1,221,543
Storage & Warehousing — 13.1%		
Americold Realty Trust	47,075	1,202,296
Extra Space Storage, Inc.	49,248	4,455,959
Industrial Logistics Properties Trust	45,310	891,248
Iron Mountain, Inc.	58,542	1,897,346
Liberty Property Trust	40,812	1,709,207
Life Storage, Inc.	28,073	2,610,508
Public Storage	10,967	2,219,830
9	,	14,986,394
Strip Centers — 5.4%		
Regency Centers Corp.	20,849	1 222 /10
SITE Centers Corp.	133,259	1,223,419 1,475,177
Urban Edge Properties	106,378	1,768,002
Weingarten Realty Investors	69,219	
weingarten healty investors	09,219	1,717,324
		6,183,922
Telecommunications — 4.5%		
Equinix, Inc.	14,748	5,199,555
TOTAL REAL ESTATE INVESTMENT TRUSTS		
(Cost \$112,907,396)		113,637,614
SHORT-TERM INVESTMENTS — 0.9%		
BlackRock Liquidity Funds FedFund Portfolio	_	
Institutional Shares		
(Cost \$1,017,942)	1,017,942	1,017,942
TOTAL INVESTMENTS — 101.1%		
(Cost \$115,021,904)		115,602,408
Other Assets & Liabilities — (1.1)%		(1,236,692)
TOTAL NET ASSETS — 100.0%		\$114,365,716
† See Security Valuation Note.		

ecurity.

ust.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Real Estate Securities Fund

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

1,017,942

TOTAL INVESTMENTS \$115,602,408 \$115,602,408

INVESTMENTS

ASSELS TABLE						
Description	1	Total Market /alue at !/31/2018		Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input
COMMON STOCKS REAL ESTATE INVESTMENT	\$	946,852		946,852	\$—	\$—
TRUSTS SHORT-TERM	11	3,637,614	1	13,637,614	_	_

1,017,942

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Aggressive Allocation Fund

	Number of Shares	
AFFILIATED FOLUTY FUNDS - F6.69	Snares	Value†
AFFILIATED EQUITY FUNDS — 56.6%		
Penn Series Flexibly Managed Fund*	36,707	\$ 1,929,310
Penn Series Index 500 Fund*	90,991	1,895,349
Penn Series Large Cap Growth Fund*	106,826	1,912,178
Penn Series Large Cap Value Fund*	193,883	5,083,605
Penn Series Large Core Value Fund*	326,691	5,687,697
Penn Series Large Growth Stock Fund*	15,802	631,286
Penn Series Mid Cap Growth Fund*	66,650	1,267,007
Penn Series Mid Cap Value Fund*	136,420	3,083,098
Penn Series Mid Core Value Fund* Penn Series Real Estate Securities Fund*	149,641	3,130,494
	89,171	1,834,243
Penn Series Small Cap Growth Fund*	51,684	1,912,313
Penn Series Small Cap Index Fund* Penn Series Small Cap Value Fund*	30,932	626,679 1,881,483
Penn Series SMID Cap Growth Fund*	58,870 51,299	1,278,895
Penn Series SMID Cap Growth Fund* Penn Series SMID Cap Value Fund*		
renin series similo cap value runu	186,183	4,406,956
TOTAL AFFILIATED EQUITY FUNDS (Cost \$31,487,935)		36,560,593
(10004)		30,300,333
AFFILIATED FIXED INCOME FUNDS — 9.1%		
Penn Series High Yield Bond Fund*	99,598	1,282,819
Penn Series Limited Maturity Bond Fund*	375,132	4,599,119
TOTAL AFFILIATED FIXED INCOME FUNDS		
(Cost \$5,757,087)		5,881,938
AFFILIATED INTERNATIONAL EQUITY FUNDS	— 33 <b>.</b> 2%	
Penn Series Developed International Index		
Fund*	528,109	6,453,488
Penn Series Emerging Markets Equity Fund*	635,795	7,241,704
Penn Series International Equity Fund*	293,438	7,779,045
TOTAL AFFILIATED INTERNATIONAL EQUITY	FUNDS	
(Cost \$19,874,200)		21,474,237
SHORT-TERM INVESTMENTS — 0.4%		
BlackRock Liquidity Funds FedFund Portfolio Institutional Shares	-	
(Cost \$254,951)	254,951	254,951
TOTAL INVESTMENTS — 99.3%		
(Cost \$57,374,173)		64,171,719
Other Assets & Liabilities — 0.7%		432,486
TOTAL NET ASSETS — 100.0%		\$64,604,205

<sup>\*</sup> Non-income producing security.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE					
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input	
AFFILIATED EQUITY					
FUNDS	\$36,560,593	\$36,560,593	\$ <del></del>	\$ <del></del>	
AFFILIATED FIXED					
INCOME FUNDS	5,881,938	5,881,938	_	_	
AFFILIATED					
INTERNATIONAL					
EQUITY FUNDS	21,474,237	21,474,237	_	_	
SHORT-TERM					
INVESTMENTS	254,951	254,951	_	_	
TOTAL INVESTMENTS	\$64,171,719	\$64,171,719	\$—	\$	

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

<sup>†</sup> See Security Valuation Note.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Moderately Aggressive Allocation Fund

Penn Series Flexibly Managed Fund* 248,301 \$ 13,050,717 Penn Series Index 500 Fund* 307,727 6,409,945 Penn Series Large Cap Growth Fund* 361,286 6,467,017 Penn Series Large Cap Value Fund* 655,720 17,192,975 Penn Series Large Core Value Fund* 1,104,849 19,235,422 27,3440 2,134,925 Penn Series Large Growth Stock Fund* 53,440 2,134,925 Penn Series Mid Cap Growth Fund* 225,400 4,284,855 Penn Series Mid Cap Value Fund* 369,062 8,340,807 Penn Series Mid Core Value Fund* 404,854 8,469,538 Penn Series Mid Core Value Fund* 116,531 4,311,635 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series Smil Cap Value Fund* 199,090 6,362,925 Penn Series Smil Cap Value Fund* 539,706 12,774,835 TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS—18.3% Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS—25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Developed International Index Fund* 2,725,369 15,279,512 Penn Series International Equity Fund* 827,098 17,814,962 Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS—0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS—99.7% (Cost \$183,049,329) 217,340,227 Cost \$183,049,329) 578,098  Cother Assets & Liabilities—0.3% 578,098		Number of Shares	Value†
Penn Series Index 500 Fund* Penn Series Large Cap Growth Fund* Penn Series Large Cap Value Fund* Penn Series Large Cap Value Fund* Penn Series Large Core Value Fund* Penn Series Large Core Value Fund* Penn Series Large Growth Stock Fund* Penn Series Large Growth Stock Fund* Penn Series Mid Cap Growth Fund* Penn Series Mid Cap Growth Fund* Penn Series Mid Cap Value Fund* Penn Series Mid Cap Value Fund* Penn Series Mid Cap Value Fund* Penn Series Mid Core Value Fund* Penn Series Smid Cap Value Fund* Penn Series Real Estate Securities Fund* Penn Series Small Cap Growth Fund* Penn Series Small Cap Value Fund* Penn Series Small Cap Value Fund* Penn Series Small Cap Value Fund* Penn Series SMID Cap Value Fund* Penn Series SMID Cap Growth Fund* Penn Series SMID Cap Value Fund* Penn Series SMID Cap Value Fund* Penn Series SMID Cap Value Fund* TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705)  AFFILIATED FIXED INCOME FUNDS Penn Series Quality Bond Fund* Penn Series Quality Bond Fund* TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233)  AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$38,410,233)  AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250)  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250)  S5,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250)  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141)  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329)  Other Assets & Liabilities — 0.3%  578,098	AFFILIATED EQUITY FUNDS — 55.8%		
Penn Series Large Cap Growth Fund* 361,286 6,467,011 Penn Series Large Cap Value Fund* 655,720 17,192,975 Penn Series Large Core Value Fund* 1,104,849 19,235,422 1134,925 Penn Series Mid Cap Growth Fund* 225,400 4,284,855 Penn Series Mid Cap Value Fund* 369,062 8,340,801 Penn Series Mid Cap Value Fund* 404,854 8,469,538 Penn Series Mid Core Value Fund* 301,532 6,202,521 Penn Series Small Cap Growth Fund* 209,212 4,238,635 Penn Series Small Cap Index Fund* 209,212 4,238,635 Penn Series Small Cap Value Fund* 209,212 4,238,635 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series Smill Cap Growth Fund* 386,747 2,162,614 Penn Series SMID Cap Growth Fund* 539,706 12,774,835 TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,349  Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS—25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835	Penn Series Flexibly Managed Fund*	248,301	\$ 13,050,710
Penn Series Large Cap Value Fund* 655,720 17,192,975 Penn Series Large Core Value Fund* 1,104,849 19,235,422 Penn Series Large Growth Stock Fund* 53,440 2,134,925 Penn Series Mid Cap Growth Fund* 225,400 4,284,855 Penn Series Mid Cap Value Fund* 369,062 8,340,807 Penn Series Mid Cap Value Fund* 404,854 8,469,538 Penn Series Mid Core Value Fund* 301,532 6,202,527 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,653 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series Smil Cap Value Fund* 199,090 6,362,925 Penn Series Smil Cap Value Fund* 539,706 12,774,835 TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 761,255 11,159,994 TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835	Penn Series Index 500 Fund*	307,727	6,409,945
Penn Series Large Core Value Fund* 1,104,849 19,235,422 Penn Series Large Growth Stock Fund* 53,440 2,134,925 Penn Series Mid Cap Growth Fund* 225,400 4,284,855 Penn Series Mid Cap Value Fund* 369,062 8,340,805 Penn Series Mid Core Value Fund* 404,854 8,469,538 Penn Series Real Estate Securities Fund* 301,532 6,202,527 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series Smill Cap Growth Fund* 199,090 6,362,925 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 57,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 57,020,835	Penn Series Large Cap Growth Fund*	361,286	6,467,011
Penn Series Large Growth Stock Fund* 53,440 2,134,925 Penn Series Mid Cap Growth Fund* 225,400 4,284,855 Penn Series Mid Cap Value Fund* 369,062 8,340,807 Penn Series Mid Core Value Fund* 404,854 8,469,538 Penn Series Real Estate Securities Fund* 301,532 6,202,527 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Index Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Growth Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 578,098	Penn Series Large Cap Value Fund*	655,720	17,192,975
Penn Series Mid Cap Growth Fund* 225,400 4,284,855 Penn Series Mid Cap Value Fund* 369,062 8,340,801 Penn Series Mid Core Value Fund* 404,854 8,469,538 Penn Series Real Estate Securities Fund* 301,532 6,202,521 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 578,098	Penn Series Large Core Value Fund*	1,104,849	19,235,422
Penn Series Mid Cap Value Fund* 369,062 8,340,807 Penn Series Mid Core Value Fund* 404,854 8,469,538 Penn Series Real Estate Securities Fund* 301,532 6,202,527 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3% BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 578,098	Penn Series Large Growth Stock Fund*	53,440	2,134,929
Penn Series Mid Core Value Fund* 404,854 8,469,538 Penn Series Real Estate Securities Fund* 301,532 6,202,521 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994 TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3% BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3% 578,098	Penn Series Mid Cap Growth Fund*	225,400	4,284,855
Penn Series Real Estate Securities Fund* 301,532 6,202,521 Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series Small Cap Value Fund* 86,747 2,162,614 Penn Series SMID Cap Growth Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 578,098		369,062	8,340,801
Penn Series Small Cap Growth Fund* 116,531 4,311,635 Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3% Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3% Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3% BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 578,098	Penn Series Mid Core Value Fund*	404,854	8,469,538
Penn Series Small Cap Index Fund* 209,212 4,238,633 Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	Penn Series Real Estate Securities Fund*	301,532	6,202,521
Penn Series Small Cap Value Fund* 199,090 6,362,925 Penn Series SMID Cap Growth Fund* 86,747 2,162,614 Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series International Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	Penn Series Small Cap Growth Fund*	116,531	4,311,635
Penn Series SMID Cap Growth Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	Penn Series Small Cap Index Fund*	209,212	4,238,633
Penn Series SMID Cap Value Fund* 539,706 12,774,835  TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705) 121,639,345  AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,839  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  578,098	Penn Series Small Cap Value Fund*	199,090	6,362,925
TOTAL AFFILIATED EQUITY FUNDS (Cost \$95,418,705)  AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund*	Penn Series SMID Cap Growth Fund*	86,747	2,162,614
AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	Penn Series SMID Cap Value Fund*	539,706	12,774,835
AFFILIATED FIXED INCOME FUNDS — 18.3%  Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	TOTAL AFFILIATED EQUITY FUNDS		
Penn Series High Yield Bond Fund* 336,875 4,338,952 Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	(Cost \$95,418,705)		121,639,349
Penn Series Limited Maturity Bond Fund* 1,994,042 24,446,952 Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	AFFILIATED FIXED INCOME FUNDS — 18.3%		
Penn Series Quality Bond Fund* 761,255 11,159,994  TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233) 39,945,898  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227  Other Assets & Liabilities — 0.3% 578,098	Penn Series High Yield Bond Fund*	336,875	4,338,952
TOTAL AFFILIATED FIXED INCOME FUNDS (Cost \$38,410,233)  AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund*	Penn Series Limited Maturity Bond Fund*	1,994,042	24,446,952
AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%	Penn Series Quality Bond Fund*	761,255	11,159,994
AFFILIATED INTERNATIONAL EQUITY FUNDS — 25.3%  Penn Series Developed International Index Fund*	TOTAL AFFILIATED FIXED INCOME FUNDS		
Penn Series Developed International Index Fund* 1,250,369 15,279,512 Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,839  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3% 578,098	(Cost \$38,410,233)		39,945,898
Fund* 1,250,369 15,279,512  Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962  Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,839  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3%	AFFILIATED INTERNATIONAL EQUITY FUNDS	S — 25.3%	
Penn Series Emerging Markets Equity Fund* 1,564,088 17,814,962 Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3% 578,098	Penn Series Developed International Index		
Penn Series International Equity Fund* 827,098 21,926,365  TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,835  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3% 578,098	Fund*	1,250,369	15,279,512
TOTAL AFFILIATED INTERNATIONAL EQUITY FUNDS (Cost \$48,486,250) 55,020,839  SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3% 578,098	Penn Series Emerging Markets Equity Fund*	1,564,088	17,814,962
SHORT-TERM INVESTMENTS — 0.3%	Penn Series International Equity Fund*	827,098	21,926,365
SHORT-TERM INVESTMENTS — 0.3%  BlackRock Liquidity Funds FedFund	TOTAL AFFILIATED INTERNATIONAL EQUITY	/ FUNDS	
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares (Cost \$734,141) 734,141  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) 217,340,227 Other Assets & Liabilities — 0.3% 578,098	(Cost \$48,486,250)		55,020,839
Portfolio - Institutional Shares (Cost \$734,141)  TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329)  Other Assets & Liabilities — 0.3%  217,340,227  578,098	SHORT-TERM INVESTMENTS — 0.3%		
(Cost \$734,141)       734,141       734,141         TOTAL INVESTMENTS — 99.7%       217,340,227         (Cost \$183,049,329)       217,340,227         Other Assets & Liabilities — 0.3%       578,098	BlackRock Liquidity Funds FedFund		
TOTAL INVESTMENTS — 99.7% (Cost \$183,049,329) Other Assets & Liabilities — 0.3%  578,098	Portfolio - Institutional Shares		
(Cost \$183,049,329)       217,340,227         Other Assets & Liabilities — 0.3%       578,098	(Cost \$734,141)	734,141	734,141
Other Assets & Liabilities — 0.3% 578,098	TOTAL INVESTMENTS — 99.7%		
	(Cost \$183,049,329)		217,340,227
TOTAL NET ASSETS — 100.0% \$217,918,325	Other Assets & Liabilities — 0.3%		578,098
	TOTAL NET ASSETS — 100.0%		\$217,918,325

12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE

Summary of inputs used to value the Fund's investments as of

ASSETS TABLE					
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input	
AFFILIATED EQUITY					
FUNDS	\$121,639,349	\$121,639,349	\$ <del></del>	\$ <del></del>	
AFFILIATED FIXED					
INCOME FUNDS	39,945,898	39,945,898	_	_	
AFFILIATED					
INTERNATIONAL					
EQUITY FUNDS	55,020,839	55,020,839	_	_	
SHORT-TERM					
INVESTMENTS	734,141	734,141	_	_	
TOTAL INVESTMENTS	\$217,340,227	\$217,340,227	\$—	\$—	

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

<sup>†</sup> See Security Valuation Note.

<sup>\*</sup> Non-income producing security.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Moderate Allocation Fund

	Number of	
	Shares	Value†
AFFILIATED EQUITY FUNDS — 44.1%		
Penn Series Flexibly Managed Fund*	332,598	\$ 17,481,348
Penn Series Index 500 Fund*	274,817	5,724,443
Penn Series Large Cap Growth Fund*	322,644	5,775,331
Penn Series Large Cap Value Fund*	548,979	14,394,220
Penn Series Large Core Value Fund*	986,688	17,178,234
Penn Series Large Growth Stock Fund*	71,589	2,859,977
Penn Series Mid Cap Growth Fund*	301,947	5,740,014
Penn Series Mid Cap Value Fund*	370,815	8,380,415
Penn Series Mid Core Value Fund*	677,925	14,182,196
Penn Series Real Estate Securities Fund*	269,311	5,539,718
Penn Series Small Cap Growth Fund*	78,050	2,887,864
Penn Series Small Cap Index Fund*	280,265	5,678,175
Penn Series Small Cap Value Fund*	266,702	8,523,801
Penn Series SMID Cap Growth Fund*	116,204	2,896,968
Penn Series SMID Cap Value Fund*	481,990	11,408,695
TOTAL AFFILIATED EQUITY FUNDS		
(Cost \$98,178,508)		128,651,399
AFFILIATED FIXED INCOME FUNDS — 38.8%		
Penn Series High Yield Bond Fund*	676,839	8,717,684
Penn Series Limited Maturity Bond Fund*	3,641,948	44,650,282
Penn Series Quality Bond Fund*	4,078,341	59,788,481
TOTAL AFFILIATED FIXED INCOME FUNDS		
(Cost \$105,519,553)		113,156,447
AFFILIATED INTERNATIONAL EQUITY FUNDS	S — 17.2%	
Penn Series Developed International Index		
Fund*	1,196,305	14,618,842
Penn Series Emerging Markets Equity Fund*	1,309,336	14,913,341
Penn Series International Equity Fund*	775,498	20,558,450
TOTAL AFFILIATED INTERNATIONAL EQUITY	/ FUNDS	
(Cost \$41,681,356)		50,090,633
TOTAL INVESTMENTS — 100.1%		
(Cost \$245,379,417)		291,898,479
Other Assets & Liabilities — (0.1)%		(280,396)
TOTAL NET ASSETS — 100.0%		\$291,618,083

<sup>†</sup> See Security Valuation Note.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE					
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input	
AFFILIATED EQUITY					
FUNDS	\$128,651,399	\$128,651,399	\$	\$ <del></del>	
AFFILIATED FIXED					
INCOME FUNDS	113,156,447	113,156,447	_	_	
AFFILIATED					
INTERNATIONAL					
EQUITY FUNDS	50,090,633	50,090,633			
TOTAL INVESTMENTS	\$291,898,479	\$291,898,479	\$	\$	

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

<sup>\*</sup> Non-income producing security.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Moderately Conservative Allocation Fund

	Number of Shares	Value†
AFFILIATED EQUITY FUNDS — 32.0%		
Penn Series Flexibly Managed Fund*	133,605	\$ 7,022,276
Penn Series Index 500 Fund*	41,390	862,158
Penn Series Large Cap Growth Fund*	97,193	1,739,752
Penn Series Large Cap Value Fund*	165,375	4,336,130
Penn Series Large Core Value Fund*	297,216	5,174,525
Penn Series Mid Cap Value Fund*	74,447	1,682,493
Penn Series Mid Core Value Fund*	81,678	1,708,694
Penn Series Real Estate Securities Fund*	81,100	1,668,219
Penn Series Small Cap Index Fund*	42,204	855,059
Penn Series Small Cap Value Fund*	53,552	1,711,531
Penn Series SMID Cap Value Fund*	72,590	1,718,215
TOTAL AFFILIATED EQUITY FUNDS		
(Cost \$23,486,848)		28,479,052
AFFILIATED FIXED INCOME FUNDS — 57.5%		
Penn Series High Yield Bond Fund*	203,925	2,626,558
Penn Series Limited Maturity Bond Fund*	1,829,199	22,425,986
Penn Series Quality Bond Fund*	1,782,164	26,126,530
TOTAL AFFILIATED FIXED INCOME FUNDS		
(Cost \$47,580,982)		51,179,074
AFFILIATED INTERNATIONAL EQUITY FUNDS	— 10.0%	
Penn Series Developed International Index		
Penn Series Developed International Index Fund*	216,251	2,642,592
•	216,251 157,817	, ,
Fund*	,	1,797,538
Fund* Penn Series Emerging Markets Equity Fund*	157,817 166,891	2,642,592 1,797,538 4,424,280
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund*	157,817 166,891	1,797,538
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund* TOTAL AFFILIATED INTERNATIONAL EQUITY	157,817 166,891	1,797,538 4,424,280
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund* TOTAL AFFILIATED INTERNATIONAL EQUITY (Cost \$7,869,415)	157,817 166,891 <b>FUNDS</b>	1,797,538 4,424,280
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund* TOTAL AFFILIATED INTERNATIONAL EQUITY (Cost \$7,869,415)  SHORT-TERM INVESTMENTS — 0.5% BlackRock Liquidity Funds FedFund Portfolio	157,817 166,891 <b>FUNDS</b>	1,797,538 4,424,280 8,864,410
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund* TOTAL AFFILIATED INTERNATIONAL EQUITY (Cost \$7,869,415)  SHORT-TERM INVESTMENTS — 0.5%  BlackRock Liquidity Funds FedFund Portfolio Institutional Shares (Cost \$420,548)  TOTAL INVESTMENTS — 100.0%	157,817 166,891 <b>FUNDS</b>	1,797,538 4,424,280 8,864,410
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund* TOTAL AFFILIATED INTERNATIONAL EQUITY (Cost \$7,869,415)  SHORT-TERM INVESTMENTS — 0.5%  BlackRock Liquidity Funds FedFund Portfolio Institutional Shares (Cost \$420,548)	157,817 166,891 <b>FUNDS</b>	1,797,538 4,424,280 8,864,410 420,548
Fund* Penn Series Emerging Markets Equity Fund* Penn Series International Equity Fund* TOTAL AFFILIATED INTERNATIONAL EQUITY (Cost \$7,869,415)  SHORT-TERM INVESTMENTS — 0.5%  BlackRock Liquidity Funds FedFund Portfolio Institutional Shares (Cost \$420,548)  TOTAL INVESTMENTS — 100.0%	157,817 166,891 <b>FUNDS</b>	1,797,538 4,424,280

See Security Valuation Note.

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE					
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input	
AFFILIATED EQUITY					
FUNDS	\$28,479,052	\$28,479,052	\$ <del></del>	\$ <del></del>	
AFFILIATED FIXED					
INCOME FUNDS	51,179,074	51,179,074	_	_	
AFFILIATED					
INTERNATIONAL					
EQUITY FUNDS	8,864,410	8,864,410	_	_	
SHORT-TERM					
INVESTMENTS	420,548	420,548	_	_	
TOTAL INVESTMENTS	\$88,943,084	\$88,943,084	\$—	\$	

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

<sup>\*</sup> Non-income producing security.

#### Penn Series Funds, Inc. Schedule of Investments — December 31, 2018 Conservative Allocation Fund

	Number of	
	Shares	Value†
AFFILIATED EQUITY FUNDS — 19.2%		
Penn Series Flexibly Managed Fund*	84,483	\$ 4,440,448
Penn Series Large Cap Value Fund*	62,753	1,645,387
Penn Series Large Core Value Fund*	125,320	2,181,812
Penn Series Mid Cap Value Fund*	23,550	532,229
Penn Series Mid Core Value Fund*	51,663	1,080,786
Penn Series Real Estate Securities Fund*	25,655	527,722
Penn Series SMID Cap Value Fund*	22,957	543,382
TOTAL AFFILIATED EQUITY FUNDS		
(Cost \$10,103,582)		10,951,766
AFFILIATED FIXED INCOME FUNDS — 76.6%		
Penn Series High Yield Bond Fund*	128,941	1,660,755
Penn Series Limited Maturity Bond Fund*	1,618,778	19,846,212
Penn Series Quality Bond Fund*	1,514,937	22,208,980
TOTAL AFFILIATED FIXED INCOME FUNDS		
(Cost \$41,241,505)		43,715,947
AFFILIATED INTERNATIONAL EQUITY FUNDS	— 2.9%	
Penn Series Developed International Index		
Fund*	91,159	1,113,967
Penn Series International Equity Fund*	21,105	559,493
TOTAL AFFILIATED INTERNATIONAL EQUITY	FUNDS	
(Cost \$1,650,459)		1,673,460
SHORT-TERM INVESTMENTS — 1.3%		
BlackRock Liquidity Funds FedFund Portfolio - Institutional Shares		
(Cost \$776,744)	776,744	776,744
TOTAL INVESTMENTS — 100.0%		
(Cost \$53,772,290)		57,117,917
Other Assets & Liabilities — 0.0%		(26,002
TOTAL NET ASSETS — 100.0%		\$57,091,915

Summary of inputs used to value the Fund's investments as of 12/31/2018 are as follows (See Security Valuation Note):

ASSETS TABLE					
Description	Total Market Value at 12/31/2018	Level 1 Quoted Price	Level 2 Significant Observable Input	Level 3 Significant Unobservable Input	
AFFILIATED EQUITY					
FUNDS	\$10,951,766	\$10,951,766	\$—	\$ <del></del>	
AFFILIATED FIXED					
INCOME FUNDS	43,715,947	43,715,947	_	_	
AFFILIATED					
INTERNATIONAL					
EQUITY FUNDS	1,673,460	1,673,460			
SHORT-TERM					
INVESTMENTS	776,744	776,744	_	_	
TOTAL INVESTMENTS	\$57,117,917	\$57,117,917	\$—	\$—	

It is the Fund's practice to recognize transfers in and transfers out at the fair value as of the beginning of period. The Fund did not have any transfers in and transfers out of Level 2 or Level 3 fair value hierarchy during the reporting period.

 $\label{thm:companying} The \ accompanying \ notes \ are \ an \ integral \ part \ of \ these \ financial \ statements.$ 

<sup>†</sup> See Security Valuation Note.

<sup>\*</sup> Non-income producing security.

	Money	Limited	Quality	High Yield
	Market	Maturity Bond	Bond	Bond
	Fund	Fund	Fund	Fund
ASSETS Investments at value Foreign currency at value Initial margin held by broker for open futures Interest and dividends receivable Futures variation margin receivable Receivable for investment securities sold Other assets  Total Assets	\$110,872,874 ————————————————————————————————————	\$235,838,704 	\$425,330,242 — 883,742 3,666,588 227,890 — 13,829 430,122,291	\$149,276,602 108,257 2,641,445 2,048,594 5,103 154,080,001
Cash overdraft Payable for investment securities purchased Payable for capital stock redeemed Payable to investment adviser (See Note 3) Payable to the administrator (See Note 3) Other liabilities Total Liabilities NET ASSETS  Investments at cost Foreign currency at cost	28,980 7,205 46,922 83,107 \$110,933,077 \$110,872,874 \$	1,478,643 3,192,739 93,334 18,434 114,534 4,897,684 \$233,216,034	14,103,359 6,615,179 159,784 32,324 184,401 21,095,047 \$409,027,244 \$432,595,242 \$	2,914 1,887,050 1,697,494 60,607 11,989 96,000 3,756,054 \$150,323,947 \$155,705,460 \$ 112,601
COMPONENTS OF NET ASSETS: Paid-in Capital Total distributable earnings (loss)  NET ASSETS	\$110,933,156	\$237,736,878	\$419,332,497	\$165,936,350
	(79)	(4,520,844)	(10,305,253)	(15,612,403)
	\$110,933,077	\$233,216,034	<b>\$409,027,244</b>	\$150,323,947
Shares outstanding, \$0.10 par value, 500 million shares authorized	<u>110,917,432</u>	19,028,634	<u>27,903,808</u>	<u>11,668,093</u>
	\$ 1.00	\$ 12.26	<b>\$ 14.66</b>	\$ 12.88

	Flexibly Managed Fund	Balanced Fund	Large Growth Stock Fund	Large Cap Growth Fund
ASSETS				
Investments of affiliated issuers at value Investments of unaffiliated issuers at value Cash	\$ — 3,705,337,765	\$74,911,966 57,447	\$ 280,558,637	\$ — 53,412,085 500
Interest and dividends receivable	11,409,797 220,402	169	625,252 5,584	32,623 21,705
Receivable for investment securities sold	13,636,022	45 <b>,</b> 964	1,824,628	76,626
Other assets	122,311	2,554	9,867	1,842
Total Assets	3,730,726,297	75,018,100	283,023,968	53,545,381
LIABILITIES Cash overdraft	_	24	_	_
Written options, at value	13,942,582 8,833,650	_	<del></del> 801	_
Payable for capital stock redeemed	5,799,290	150,281	8,552	33,986
Payable to investment adviser (See Note 3)	2,217,393 289,204 1,393,943	5,937 30,031	174,698 22,655 142,741	25,527 4,286 37,702
Total Liabilities	32,476,062	186,273	349,447	101,501
NET ASSETS	\$3,698,250,235	\$74,831,827	\$282,674,521	\$53,443,880
Investments of affiliated issuers at cost Investments of unaffiliated issuers at cost Written options, premiums received	\$ \$3,510,547,433 \$ (23,897,767)	\$48,099,278 \$ 57,447 \$ —	\$ \$231,631,122 \$	\$ — \$43,600,046 \$ —
COMPONENTS OF NET ASSETS:				
Paid-in Capital Total distributable earnings (loss)	\$3,495,877,697 202,372,538	\$49,860,810 24,971,017	\$235,267,983 47,406,538	\$43,907,450 9,536,430
NET ASSETS	\$3,698,250,235	\$74,831,827	\$282,674,521	\$53,443,880
Shares outstanding, \$0.10 par value, 250 million shares authorized	70,367,107		7,076,296	
Shares outstanding, \$0.0001 par value, 250 million shares authorized		3,831,467		2,985,778
NET ASSET VALUE, OFFERING AND REDEMPTION PRICE PER SHARE	\$ 52.56	\$ 19.53	\$ 39.95	\$ 17.90

	Large Core Growth Fund	Large Cap Value Fund	Large Core Value Fund	Index 500 Fund
ASSETS  Investments at value Foreign currency at value Interest and dividends receivable Reclaims receivable Receivable for investment securities sold Receivable for capital stock sold Future variation margin receivable Other assets  Total Assets	\$ 118,107,641 30,503 39,305 16,600 — 312,405 4,091 	\$ 178,892,207 — 296,099 — 515,130 — 6,107 — 179,709,543	\$ 175,376,165 — 341,262 4,277 104,655 1,006,969 — 6,369 	\$ 413,629,400 — 491,640 — 1,051,918 2,251,413 34,560 15,088 417,474,019
LIABILITIES  Cash overdraft  Payable for investment securities purchased  Payable for capital stock redeemed  Payable to investment adviser (See Note 3)  Payable to the administrator (See Note 3)  Other liabilities  Total Liabilities  NET ASSETS	37 61,664 9,494 74,840 146,035 \$ 118,364,510	67,917 101,960 14,193 84,882 268,952 \$ 179,440,591	488,174 77,506 101,997 14,338 85,698 767,713 \$ 176,071,984	463 277,973 52,053 48,052 34,646 196,490 609,677 \$ 416,864,342
Investments at cost	\$ 107,415,559	\$ 190,585,628	\$ 184,565,384	\$ 219,105,929
	\$ 30,503	\$ —	\$ —	\$ —
COMPONENTS OF NET ASSETS: Paid-in Capital Total distributable earnings (loss) NET ASSETS	\$ 109,005,627	\$ 193,607,328	\$ 185,627,567	\$ 230,176,112
	9,358,883	(14,166,737)	(9,555,583)	186,688,230
	\$ 118,364,510	\$ 179,440,591	<b>\$ 176,071,984</b>	\$ 416,864,342
Shares outstanding, \$0.10 par value, 250 million shares authorized	5,282,473	6,843,661	10,116,034	20,010,024
	<b>\$ 22.41</b>	\$ 26.22	\$ 17.41	\$ 20.83

	Mid Cap Growth Fund	Mid Cap Value Fund	Mid Core Value Fund	SMID Cap Growth Fund
ASSETS Investments at value Cash	\$111,235,320 —	\$139 <b>,</b> 604 <b>,</b> 141	\$78,730,258 500	\$58,705,357 —
Interest and dividends receivable Reclaims receivable	48,534	345,310	187,136 12,574	15,950
Receivable for investment securities sold Receivable for capital stock sold Net unrealized appreciation of forward foreign currency contracts	1,366,881	2,002,508	222,108 612,758 5,871	446,897 806,006 —
Other assets	3,965	5,319	2,853	2,104
Total Assets	112,654,700	141,957,278	79,774,058	59,976,314
LIABILITIES			4	
Foreign currency overdraft	_		284,465	_
Payable for capital stock redeemed	16,498	34,233	38,174	8,510
Payable to investment adviser (See Note 3)	67,685	68,396	49,492	38,227
Payable to the administrator (See Note 3)	9,063	11,872	6,425	4,767
Net unrealized depreciation of forward foreign currency contracts	_	_	44,388	_
Other liabilities	59,480	71,373	58,980	43,146
Total Liabilities	152,726	185,874	481,928	94,650
NET ASSETS	\$112,501,974	\$141,771,404	\$79,292,130	\$59,881,664
Investments at cost	\$ 92,158,539	\$144,944,385	\$87,360,821	\$60,419,723
COMPONENTS OF NET ASSETS:				
Paid-in Capital	\$ 94,689,870 17,812,104	\$149,361,351 (7,589,947)	\$89,172,231 (9,880,101)	\$61,731,968 (1,850,304)
NET ASSETS	\$112,501,974	\$141,771,404	\$79,292,130	\$59,881,664
Shares outstanding, \$0.0001 par value, 250 million shares authorized	5,918,131	6,274,044	3,790,993	2,402,376
			J,/ 70,777	= 2,702,370
NET ASSET VALUE, OFFERING AND REDEMPTION PRICE PER SHARE	\$ 19.01	\$ 22.60	\$ 20.92	\$ 24.93

	SMID Cap Value Fund	Small Cap Growth Fund	Small Cap Value Fund	Small Cap Index Fund
ASSETS Investments at value Cash Initial margin held by broker for open futures Interest and dividends receivable Reclaims receivable Receivable for investment securities sold Receivable for capital stock sold Future variation margin receivable Other assets Total Assets	\$80,090,419 	\$ 91,686,146 	\$208,291,300 	\$ 69,322,872 506 4 100,231 — 1,456,785 10,125 2,562 70,893,085
LIABILITIES Cash overdraft Payable for investment securities purchased Payable for capital stock redeemed Payable to investment adviser (See Note 3) Payable to the administrator (See Note 3) Other liabilities Total Liabilities	85 224,891 48,907 58,688 6,580 44,434 383,585	1 29,844 14,943 59,082 7,573 52,747 164,190	74,381 27,356 132,076 17,479 118,485	66,515 17,518 18,153 5,741 61,595
NET ASSETS	\$80,918,617	\$ 93,243,043	\$211,285,199	\$ 70,723,563
Investments at cost	\$87,186,717	\$ 75,831,236	\$207,281,372	\$ 60,267,226
Paid-in Capital	\$88,343,261 (7,424,644) <b>\$80,918,617</b>	\$ 77,523,466 15,719,577 <b>\$ 93,243,043</b>	\$211,994,411 (709,212) <b>\$211,285,199</b>	\$ 61,875,420 8,848,143 <b>\$ 70,723,563</b>
Shares outstanding, \$0.10 par value, 500 million shares authorized	3,419,136	2,519,902	6,611,565	3,490,311
REDEMPTION PRICE PER SHARE	\$ 23.67	\$ 37.00	\$ 31.96	\$ 20.26

	Developed International Index Fund	International Equity Fund	Emerging Markets Equity Fund	Real Estate Securities Fund
ASSETS				
Investments at value Foreign currency at value Initial margin held by broker for open futures	\$96,866,131 648,238 269,778	\$295,072,123 1,109,341	\$148,811,533 26,514	\$115,602,408 —
Interest and dividends receivable Reclaims receivable	115,128 400,759	308,298 972,735	307,363 61,769	640,985
Receivable for investment securities sold Receivable for capital stock sold	62,000 313,917	1,774,296 850,617	241,309	174,219
Future variation margin receivable	1,480		_	_
Net unrealized appreciation of forward foreign currency contracts	.,,,,,,	_	61,129	_
Other assets	3,411	10,299	4,957	3,970
Total Assets	98,680,842	300,097,709	149,514,574	116,421,582
LIABILITIES				
Cash overdraft	15	_	23	86
Payable for investment securities purchased	——————————————————————————————————————	2,717,409	58,776	701,775
Payable for capital stock redeemed	59,195	91,462	1,839,182	1,210,245
Payable to investment adviser (See Note 3)	25,305	206,516	116,926	72,398
Payable to the administrator (See Note 3)	7,827	23,431	11,512	9,312
Deferred Indian capital gains tax	7,027	3,173	56,748	J,J 12
Net unrealized depreciation of forward foreign currency contracts	_	J, 17 J	308,297	_
Other liabilities	117,069	163,300	150,462	62,050
Total Liabilities	209,411	3,205,291	2,541,926	2,055,866
NET ASSETS	\$98,471,431	\$296,892,418	\$146,972,648	\$114,365,716
Investments at cost	\$84,832,786	\$287,524,339	\$142,408,691	\$115,021,904
Foreign currency at cost	\$ 649,271	\$ 1,101,159	\$ 26,297	
COMPONENTS OF NET ASSETS:				
Paid-in Capital	\$88,346,988	\$294,336,295	\$143,207,368	\$113,968,464
Total distributable earnings (loss)	10,124,443	2,556,123	3,765,280	397,252
NET ASSETS	\$98,471,431	\$296,892,418	\$146,972,648	\$114,365,716
Shares outstanding, \$0.10 par value, 250 million shares authorized		11,201,217		
Shares outstanding, \$0.0001 par value, 250 million shares authorized	8,057,483		12,908,142	5,560,074
NET ASSET VALUE, OFFERING AND				
REDEMPTION PRICE PER SHARE	\$ 12.22	\$ 26.51	\$ 11.39	\$ 20.57

	Aggressive Allocation Fund	Moderately Aggressive Allocation Fund	Moderate Allocation Fund	Moderately Conservative Allocation Fund
Investments of affiliated issuers at value Investments of unaffiliated issuers at value Interest and dividends receivable Receivable for investment securities sold Receivable for capital stock sold Other assets Total Assets	\$ 63,916,768 254,951 491 26,300 444,644 2,219 64,645,373	\$ 216,606,086 734,141 2,269 614,032 74,787 7,664 218,038,979	\$ 291,898,479	\$ 88,522,536 420,548 882 128,566 - 3,002 89,075,534
LIABILITIES  Cash overdraft  Payable for capital stock redeemed  Payable to investment adviser (See Note 3)  Payable to the administrator (See Note 3)  Other liabilities  Total Liabilities	1,866 6,685 5,142 27,475 41,168	22,569 17,545 80,534 120,654	54,835 262,747 29,406 23,087 104,830 474,905	97,441 9,245 7,022 34,620 148,337
NET ASSETS	\$ 64,604,205	\$ 217,918,325	\$ 291,618,083	\$ 88,927,197
Investments of affiliated issuers at cost Investments at unaffiliated issuers at cost	\$ 57,119,222 254,951	\$ 182,315,188 734,141	\$ 245,379,417	\$ 78,937,245 420,548
COMPONENTS OF NET ASSETS: Paid-in Capital	\$ 57,983,727 6,620,478 <b>\$ 64,604,205</b>	\$ 184,203,047 33,715,278 <b>\$ 217,918,325</b>	\$ 245,844,605 45,773,478 <b>\$ 291,618,083</b>	\$ 79,501,258 9,425,939 <b>\$ 88,927,197</b>
Shares outstanding, \$0.0001 par value, 250 million shares authorized	3,719,949	12,029,225	17,690,627	5,807,640
NET ASSET VALUE, OFFERING AND REDEMPTION PRICE PER SHARE	\$ 17.37	\$ 18.12	\$ 16.48	\$ 15.31

#### Penn Series Funds, Inc. Statements of Assets and Liabilities December 31, 2018

	Conservative Allocation Fund
ASSETS Investments of affiliated issuers at value Investments of unaffiliated issuers at value Interest, and dividends receivable Receivable for investment securities sold Other assets Total Assets	\$ 56,341,173 776,744 1,533 25,329 1,822 57,146,601
LIABILITIES  Payable for capital stock redeemed Payable to investment adviser (See Note 3) Payable to the administrator (See Note 3) Other liabilities  Total Liabilities	21,037 5,823 4,360 23,466 54,686
NET ASSETS	\$ 57,091,915
Investments of affiliated issuers at cost Investments of unaffiliated issuers at cost	\$ 52,995,546 \$ 776,744
COMPONENTS OF NET ASSETS: Paid-in Capital Total distributable earnings (loss)  NET ASSETS	\$ 53,810,458 3,281,457 <b>\$ 57,091,915</b>
	122727
Shares outstanding, \$0.0001 par value, 250 million shares authorized	4,079,785
NET ASSET VALUE, OFFERING AND REDEMPTION PRICE PER SHARE	\$ 13.99

	Money Market Fund	Limited Maturity Bond Fund	Quality Bond Fund	High Yield Bond Fund
INVESTMENT INCOME:				
Dividends	\$ 39,795	\$ 23,078	\$ 89,225	\$ 176,226
Interest	1,633,986	7,786,322	15,653,802	9,462,239
Foreign tax withheld	_		_	(6,975)
Total Investment Income	1,673,781	7,809,400	15,743,027	9,631,490
EXPENSES				
Investment advisory fees (See Note 3)	304,022	1,080,321	2,010,824	821,828
Shareholder servicing fees (See Note 3)	82,915	212,793	407,320	149,743
Administration fees (See Note 3)	27,638	70,931	135,773	49,914
Accounting fees (See Note 3)	64,405	138,218	215,773	103,190
Directors' fees and expenses	4,524	11,722	22,695	8,335
Custodian fees and expenses	6,763	18,595	39,834	12,771
Pricing fees	6,646	23,540	24,525	42,380
Professional fees	11,445	25,193	38,905	17,510
Printing fees	5,735	14,961	29,466	11,380
Recaptured advisory fees (See Note 3)	543,462	<i>–</i>		<i>-</i>
Recaptured administrative fees (See Note 3)	75,300	_	_	_
Other expenses	31,384	52,341	84,085	65,784
Total Expenses	1,164,239	1,648,615	3,009,200	1,282,835
Net investment income (loss)	509,542	6,160,785	12,733,827	8,348,655
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES				
Net realized gain (loss) on investment transactions	(70)	(313,640)	(4,140,104)	(1,590,979)
Net realized gain (loss) on futures contracts	(70)	(454,470)	(726,360)	(1,550,575)
Net realized gain (loss) on foreign currencies		(4)7,7(0)	(720,300)	(133,338)
Net realized gain (loss) on forward foreign currency contracts	_	_	_	158,568
Net change in unrealized appreciation (depreciation) of investments and foreign				1,50,500
currencies	_	(2,622,408)	(11,509,721)	(10,363,367)
Net change in unrealized appreciation (depreciation) of forward foreign currency		(2,022, 100)	(11,505,721)	(10,505,507)
contracts	_	_	_	333
Net change in unrealized appreciation (depreciation) of futures contracts	_	565,525	2,203,805	
Net Realized and Unrealized Gain (Loss) on Investment Securities and Foreign				
Currencies	(70)	(2,824,993)	(14,172,380)	(11,928,783)
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	\$ 509,472	\$ 3,335,792	<b>\$ (1,438,553</b> )	\$ (3,580,128)

	Flexibly Managed Fund	Balanced Fund	Large Growth Stock Fund	Large Cap Growth Fund
INVESTMENT INCOME: Dividends Interest Foreign tax withheld Total Investment Income	\$ 83,327,425 40,571,326 (270,859) 123,627,892	\$ 1,013 803 ——————————————————————————————————	\$ 2,881,711 (6,784) (8,112) 2,866,815	\$ 759,379 4,878 (17,342) 746,915
EXPENSES  Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Professional fees Printing fees Other expenses  Total Expenses  Net investment income (loss)	27,168,518 3,516,570 1,172,190 921,460 194,348 293,126 3,920 429,911 256,128 644,781 34,600,952 89,026,940	73,801 24,600 12,000 4,097 6,356 2,587 8,776 5,363 23,067 160,647 (158,831)	2,268,359 286,989 95,663 175,367 15,846 24,422 7,278 34,455 20,725 111,547 3,040,651 (173,836)	323,337 52,910 17,637 41,152 2,927 4,988 6,289 6,679 3,976 50,910 510,805 236,110
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES  Net realized gain (loss) on affiliated investment transactions Net realized gain (loss) on unaffiliated investment transactions Net realized gain (loss) on purchased options Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of affiliated investments Net change in unrealized appreciation (depreciation) of unaffiliated investments and foreign currencies Net change in unrealized appreciation (depreciation) of purchased options Net change in unrealized appreciation (depreciation) of written options Net Realized and Unrealized Gain (Loss) on Investment Securities and Foreign Currencies	221,193,953 4,177,995 1,296,968 47,840 — (328,285,354) (2,381,269) 38,717,601 (65,232,266)	7,340,398 ————————————————————————————————————	36,075,459 — (1,907) — (37,694,955) — — (1,621,403)	5,067,671 ————————————————————————————————————
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	\$ 23,794,674	<u>\$(2,103,497)</u>	<u>\$ (1,795,239)</u>	<u>\$ 706,848</u>

	Large Core Growth Fund	Large Cap Value Fund	Large Core Value Fund	Index 500 Fund
INVESTMENT INCOME:				
Dividends Interest	\$ 998,531 30,058	\$ 4,008,612 118,930	\$ 4,731,971 12,240	\$ 9,209,010 36,090
Foreign tax withheld	(31,616)	5,290	(4,038)	
Total Investment Income	996,973	4,132,832	4,740,173	9,245,100
EXPENSES Investment advisory fees (See Note 3)	781,269	1,298,556	1,372,404	623,142
Shareholder servicing fees (See Note 3)	117,190	175,646	185,871	433,607
Administration fees (See Note 3)	39,063 85,106	58,549 117,581	61,957 123,262	144,535 224,535
Directors' fees and expenses	6,444 11,330	9,797 15,288	10,364 16,407	24,071 37,321
Pricing fees	3,265	6,292	3,413	9,988
Professional fees Printing fees	13,809 8,581	20,429 12,520	28,498 13,761	51,937 31,701
Other expenses	50,562	44,818	50,564	137,307
Total Expenses	1,116,619 (119,646)	1,759,476 2,373,356	1,866,501 2,873,672	1,718,144 <b>7,526,956</b>
	(119,040)	2,575,550	2,073,072	7,320,330
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES				
Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts	14,866,012	45,011,251 —	21,239,641	34,390,076 (175,192)
Net realized gain (loss) on foreign currencies	1,244	_	_	(175,152)
Net realized gain (loss) on forward foreign currency contracts	(8,865)	_	_	_
currencies	(10,094,918)	(62,082,127)	(35,212,678)	(60,816,443) (251,514)
Net Realized and Unrealized Gain (Loss) on Investment Securities and Foreign				(2)1,511)
Currencies	4,763,473	(17,070,876)	(13,973,037)	(26,853,073)
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	\$ 4,643,827	<u>\$ (14,697,520)</u>	<u>\$(11,099,365)</u>	\$(19,326,117)
	Mid Cap Growth Fund	Mid Cap Value Fund	Mid Core Value Fund	SMID Cap Growth Fund
INVESTMENT INCOME:				
Dividends	\$ 834,780 14,374	\$ 2,792,815 40,504	\$ 2,059,894 21,695	\$ 451,711 10,806
Foreign tax withheld		(4,366)	(13,906)	
Total Investment Income	849,154	2,828,953	2,067,683	462,517
EXPENSES Investment advisory fees (See Note 3)	881,040	949,322	671,984	507,449
Shareholder servicing fees (See Note 3)	113,277	155,343	83,998	60,894
Administration fees (See Note 3)	37,759 82,931	51,781 106,302	27,999 65,299	20,298 47,362
Directors' fees and expenses	6,215 10,692	8,693 13,605	4,694 7,858	3,354 4,585
Pricing fees	5,059	4,417	5,601	4,525
Professional fees Printing fees	13,883 8,287	18,266 11,051	9,923 6,081	7,338 4,360
Other expenses	47,189	40,276	101,770	38,104
Total Expenses	1,206,332 (357,178)	1,359,056 1,469,897	985,207 <b>1,082,476</b>	(235,752)
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND	(337,170)	1,107,077	1,002,170	(2)),1)2)
FOREIGN CURRENCIES		.=	0.400 ===	0.004.604
Net realized gain (loss) on investment transactions  Net realized gain (loss) on purchased options	10,052,924 (110,200)	17,904,839	8,689,770	8,994,654 —
Net realized gain (loss) on written options  Net realized gain (loss) on foreign currency exchange	` 54 <b>,</b> 582´ 248		(2,541)	
Net realized gain (loss) on forward foreign currencies  Net change in unrealized appreciation (depreciation) of investments	_	_	203,459	_
Net change in unrealized appreciation (depreciation) of investments and foreign currencies	(8,408,400)	(44,175,166)	(21,620,952)	(11,904,900)
and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts			12,675	
Net change in unrealized appreciation (depreciation) of purchased options	8,499	_		_
Net change in unrealized appreciation (depreciation) of written options	6,397			
Currencies	1,604,050	(26,270,327)	(12,717,589)	(2,910,246)
NET INCREASE (DESPENSE) IN NET ASSETS DESILITING EDOM OPERATIONS				
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	\$ 1,246,872	<u>\$(24,800,430)</u>	<u>\$ (11,635,113</u> )	\$ (3,145,998)

	SMID Cap Value Fund	Small Cap Growth Fund	Small Cap Value Fund	Small Cap Index Fund
INVESTMENT INCOME:				
Dividends	\$ 1,354,748 13,998	\$ 660,119 22,778	\$ 3,583,651 59,585	\$ 1,014,839 7,123
Foreign tax withheld  Total Investment Income	(5,026) 1,363,720	(3,216) 679,681	<u>(221)</u> 3,643,015	(382) 1,021,580
	1,505,720	07 5,00 1		1,02 1,500
Investment advisory fees (See Note 3)	782,564 83,846	781,797 95,695	1,813,698 228,368	246,306 73,892
Administration fees (See Note 3) Accounting fees (See Note 3)	27,949 65,199	31,898 73,047	76,123 146,872	24,632 57,471
Directors' fees and expenses Custodian fees and expenses	4,654 7,258	5,276 9,970	12,725 17,040	4,100 6,404
Pricing fees Professional fees	4,482 9,927	6,792 11,651	7,105 27,304	32,768 8,786
Printing fees	6,022	6,989	16,657	5,370
Other expenses	35,177 1,027,078	43,718 1,066,833	<u>119,945</u> 2,465,837	76,609 536,338
Net investment income (loss)	336,642	(387,152)	1,177,178	485,242
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND				
FOREIGN CURRENCIES  Net realized gain (loss) on investment transactions	10,570,032	10,582,439	20,932,520	6,674,810
Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies	_	260	_	59,986 —
Net change in unrealized appreciation (depreciation) of investments and foreign currencies	(24,741,810) —	(14,099,568) —	(55,561,077) —	(15,628,659) (105,964)
Net Realized and Unrealized Gain (Loss) on Investment Securities and Foreign Currencies	(14,171,778)	(3,516,869)	(34,628,557)	(8,999,827)
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	\$(13,835,136)	\$ (3,904,021)	\$ (33,451,379)	\$ (8,514,585)
	Developed International Index Fund	International Equity Fund	Emerging Markets Equity Fund	Real Estate Securities Fund
INVESTMENT INCOME:		International Equity Fund		
INVESTMENT INCOME: Dividends Interest Foreign tax withheld	International		Markets	Securities
Dividends	s 3,704,257	\$ 6,479,077 91,206	Markets <u>Equity Fund</u> \$ 3,850,241	Securities Fund \$ 3,831,992
Dividends	\$ 3,704,257 14,865 (315,120) 3,404,002	\$ 6,479,077 91,206 (519,628) 6,050,655	\$ 3,850,241 80,592 (464,040) 3,466,793	\$ 3,831,992 8,407 — 3,840,399
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3)	\$ 3,704,257 14,865 (315,120)	\$ 6,479,077 91,206 (519,628)	Markets Equity Fund \$ 3,850,241 80,592 (464,040)	\$ 3,831,992 8,407
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3)	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828	\$ 3,831,992 \$ 3,831,992 8,407 — 3,840,399 893,271 114,849 38,283
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,808	\$ 3,850,241 \$0,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008	\$ 3,831,992 8,407 ————————————————————————————————————
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Professional fees	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,888 11,995 46,068	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575	\$ 3,831,992 \$ 3,831,992 8,407 — 3,840,399 893,271 114,849 38,283 83,805 6,362 10,177 4,048 13,604
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,808 11,995	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136	\$ 3,831,992 8,407 — 3,840,399 893,271 114,849 38,283 83,805 6,362 10,177 4,048
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricting fees Professional fees Printing fees Printing fees	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricting fees Professional fees Printing fees Other expenses	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339 187,848	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347 85,950	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Professional fees Printing fees Other expenses Total Expenses Net investment income (loss)  NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339 187,848 890,689	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347 85,950 3,789,299	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554 2,228,538	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Printing fees Professional fees Printing fees Other expenses  Total Expenses Net investment income (loss)  NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339 187,848 890,689	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347 85,950 3,789,299	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554 2,228,538	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Printing fees Professional fees Printing fees Other expenses  Total Expenses  Net investment income (loss)  NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES Net realized gain (loss) on investment transactions Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currency contracts	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,255 5,670 28,151 91,395 12,064 7,339 187,848 890,689 2,513,313	\$ 6,479,077 91,206 (519,628) 6,050,655  2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347 85,950 3,789,299 2,261,356	\$ 3,850,241 \$0,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554 2,228,538 1,238,255	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Printing fees Professional fees Printing fees Other expenses Total Expenses Net investment income (loss)  NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES Net realized gain (loss) on investment transactions Net realized gain (loss) on foreign currencies	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339 187,848 890,689 2,513,313	\$ 6,479,077 91,206 (519,628) 6,050,655 2,879,791 307,538 102,513 225,025 17,264 90,888 11,995 46,068 22,347 85,950 3,789,299 2,261,356	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554 2,228,538 1,238,255 12,285,256 (11,223)	\$ 3,831,992 8,407 3,840,399 893,271 114,849 38,283 83,805 6,362 10,177 4,048 13,604 8,387 50,957 1,223,743 2,616,656
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Professional fees Printing fees Other expenses  Total Expenses  Net investment income (loss)  NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES Net realized gain (loss) on investment transactions Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currency contracts Net change in unrealized appreciation (depreciation) of investments and foreign currencies Net change in unrealized appreciation (depreciation) of futures contracts Net change in unrealized appreciation (depreciation) of futures contracts Net Realized and Unrealized Gain (Loss) on Investment Securities and Foreign	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339 187,848 890,689 2,513,313 1,189,309 (342,153) (62,134) (267) (19,284,592) (103,444)	\$ 6,479,077 91,206 (519,628) 6,050,655  2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347 85,950 3,789,299 2,261,356  40,077,391 (135,919) (456,207) (84,337,632)	\$ 3,850,241 80,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554 2,228,538 1,238,255 12,285,256 (11,223) 380,389 (45,234,597)	\$ 3,831,992 8,407 
Dividends Interest Foreign tax withheld Total Investment Income  EXPENSES Investment advisory fees (See Note 3) Shareholder servicing fees (See Note 3) Administration fees (See Note 3) Accounting fees (See Note 3) Directors' fees and expenses Custodian fees and expenses Pricing fees Professional fees Printing fees Other expenses  Total Expenses  Net investment income (loss)  NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES AND FOREIGN CURRENCIES Net realized gain (loss) on investment transactions Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of futures contracts Net change in unrealized appreciation (depreciation) of futures contracts	\$ 3,704,257 14,865 (315,120) 3,404,002 336,403 100,921 33,640 87,258 5,670 28,151 91,395 12,064 7,339 187,848 890,689 2,513,313 1,189,309 (342,153) (62,134) (267) (19,284,592)	\$ 6,479,077 91,206 (519,628) 6,050,655  2,879,791 307,538 102,513 225,025 17,264 90,808 11,995 46,068 22,347 85,950 3,789,299 2,261,356  40,077,391 (135,919) (456,207)	\$ 3,850,241 \$0,592 (464,040) 3,466,793 1,558,723 152,484 50,828 121,656 8,598 91,008 19,136 45,575 10,976 169,554 2,228,538 1,238,255 12,285,256 (11,223) 380,389	\$ 3,831,992 8,407 

Moderately Aggressive Aggressive Allocation Allocation Fund Fund	Moderate Allocation Fund	Moderately Conservative Allocation Fund
NVESTMENT INCOME:		
Dividends	\$ 797	\$ 11,000
Total Investment Income	797	11,000
EXPENSES		
Investment advisory fees (See Note 3)       87,449       295,778         Shareholder servicing fees (See Note 3)       65,587       225,637         Administration fees (See Note 3)       21,862       75,212         Accounting fees (See Note 3)       12,000       25,071         Directors' fees and expenses       3,645       12,613         Custodian fees and expenses       5,630       19,461         Pricing fees       2,660       1,800         Professional fees       7,930       26,693         Printing fees       4,831       16,376         Other expenses       25,080       46,139         Total Expenses       236,674       744,780	377,119 292,190 97,397 32,466 16,296 25,300 1,425 34,217 21,036 56,267	115,158 86,368 28,789 12,000 4,780 7,420 2,516 10,168 6,192 25,272 298,663
Net investment income (loss)	(952,916)	(287,663)
NET REALIZED AND UNREALIZED GAIN (LOSS) ON INVESTMENT SECURITIES  Net realized gain (loss) on affiliated investment transactions	28,132,709 (45,299,219)	7,097,540 (10,061,170)
Net Realized and Unrealized Gain (Loss) on Investment Securities (6,567,974) (17,747,079)	(17,166,510)	(2,963,630)
NET INCREASE (DECREASE) IN NET ASSETS RESULTING FROM OPERATIONS	\$ (18,119,426)	\$ (3,251,293)
Conservative Allocation Fund		
NVESTMENT INCOME:		
Dividends		
Total Investment Income		
Investment advisory fees (See Note 3)		
affiliated investments	)	

	Money Ma	rket Fund	Limited Maturity Bond Fund		
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17	
Increase (Decrease) in Net Assets				·	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies	\$ 509,542 (70) —	\$ 10,106 (10) —	\$ 6,160,785 (313,640) (454,470) (2,056,883)	\$ 4,145,693 243,727 (295,639) (700,415)	
Net Increase (Decrease) in Net Assets Resulting from Operations	509,472	10,096	3,335,792	3,393,366	
Distributions from: Net investment income	(510,090)	(10,174)			
Total Distributions	(510,090)	(10,174)			
Capital Share Transactions (1):					
Shares issued	94,951,160 510,090 (76,094,058)	56,333,786 10,175 (88,641,989)	41,604,193 — (40,908,148)	46,376,059 — (31,061,044)	
Net Increase (Decrease) in Net Assets from Capital Share Transactions	19,367,192	(32,298,028)	696,045	15,315,015	
Total Increase (Decrease)	19,366,574	(32,298,106)	4,031,837	18,708,381	
Net Assets:					
Beginning of period	91,566,503	123,864,609	229,184,197	210,475,816	
End of period	\$ 110,933,077	\$ 91,566,503	\$ 233,216,034	\$229 <b>,</b> 184 <b>,</b> 197	
(1) Shares Issued and Redeemed: Shares issued	94,951,160 510,090	56,333,787 10,175	3,431,282	3,847,557	
Shares redeemed	(76,094,058)	(88,641,989)	(3,364,472)	(2,584,211)	
	19,367,192	(32,298,027)	66,810	1,263,346	
	Quality Bo	ond Fund	High Yield I	Bond Fund	
	Quality Bo Year Ended 12/31/18	Year Ended 12/31/17	High Yield I Year Ended 12/31/18	Bond Fund Year Ended 12/31/17	
Increase (Decrease) in Net Assets	Year Ended	Year Ended	Year Ended	Year Ended	
Increase (Decrease) in Net Assets Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts	Year Ended	Year Ended	Year Ended	Year Ended	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts	Year Ended 12/31/18 \$ 12,733,827 (4,140,104)	Year Ended 12/31/17 \$ 12,605,875 1,851,434	Year Ended 12/31/18 \$ 8,348,655	Year Ended 12/31/17 \$ 9,224,509	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies	Year Ended 12/31/18 \$ 12,733,827 (4,140,104)	Year Ended 12/31/17 \$ 12,605,875 1,851,434	\$ 8,348,655 (1,590,979) — (133,338)	Year Ended 12/31/17 \$ 9,224,509 3,799,369 — (393,327)	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts	Year Ended 12/31/18 \$ 12,733,827 (4,140,104) (726,360) ————————————————————————————————————	Year Ended 12/31/17 \$ 12,605,875 1,851,434 170,808 — — 8,300,695	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) — 333	Year Ended 12/31/17 \$ 9,224,509 3,799,369 — (393,327) (581,989) 20,104 (52,033)	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign	Year Ended 12/31/18 \$ 12,733,827 (4,140,104) (726,360)	Year Ended 12/31/17 \$ 12,605,875 1,851,434 170,808	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367)	Year Ended 12/31/17 \$ 9,224,509 3,799,369 — (393,327) (581,989) 20,104	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued  Shares redeemed	Year Ended 12/31/18 \$ 12,733,827 (4,140,104) (726,360) ————————————————————————————————————	Year Ended 12/31/17 \$ 12,605,875 1,851,434 170,808 — — 8,300,695	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) — 333	Year Ended 12/31/17 \$ 9,224,509 3,799,369 — (393,327) (581,989) 20,104 (52,033)	
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued	Year Ended 12/31/18  \$ 12,733,827 (4,140,104) (726,360) (9,305,916) (1,438,553)  29,933,168	Year Ended 12/31/17 \$ 12,605,875 1,851,434 170,808 — — 8,300,695 —— 22,928,812 41,775,075	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) 333 (3,580,128)	Year Ended 12/31/17 \$ 9,224,509 3,799,369 — (393,327) (581,989) 20,104 (52,033) 12,016,633	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued  Shares redeemed	Year Ended 12/31/18  \$ 12,733,827 (4,140,104) (726,360)	Year Ended 12/31/17  \$ 12,605,875 1,851,434 170,808 8,300,695 22,928,812  41,775,075 (83,954,600)	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) 333 (3,580,128) 10,512,961 (28,075,680)	Year Ended 12/31/17  \$ 9,224,509 3,799,369 — (393,327) (581,989)  20,104 (52,033) 12,016,633  10,757,345 (19,957,641)	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued  Shares redeemed  Net Increase (Decrease) in Net Assets from Capital Share Transactions  Total Increase (Decrease)	Year Ended 12/31/18  \$ 12,733,827 (4,140,104) (726,360)	Year Ended 12/31/17  \$ 12,605,875 1,851,434 170,808	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) 333 (3,580,128)  10,512,961 (28,075,680) (17,562,719) (21,142,847)  171,466,794	Year Ended 12/31/17  \$ 9,224,509 3,799,369 — (393,327) (581,989)  20,104 (52,033) 12,016,633  10,757,345 (19,957,641) (9,200,296) 2,816,337	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued  Shares redeemed  Net Increase (Decrease) in Net Assets from Capital Share Transactions  Total Increase (Decrease)	Year Ended 12/31/18  \$ 12,733,827 (4,140,104) (726,360)	Year Ended 12/31/17  \$ 12,605,875 1,851,434 170,808	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) 333 (3,580,128) 10,512,961 (28,075,680) (17,562,719) (21,142,847)	Year Ended 12/31/17  \$ 9,224,509 3,799,369 — (393,327) (581,989)  20,104 (52,033) 12,016,633  10,757,345 (19,957,641) (9,200,296) 2,816,337	
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued  Shares redeemed  Net Increase (Decrease) in Net Assets from Capital Share Transactions  Total Increase (Decrease)  Net Assets:  Beginning of period  End of period  (a) Includes undistributed net investment loss at end of year of \$(14,179).	Year Ended 12/31/18  \$ 12,733,827 (4,140,104) (726,360)	Year Ended 12/31/17  \$ 12,605,875 1,851,434 170,808	\$ 8,348,655 (1,590,979) — (133,338) 158,568 (10,363,367) 333 (3,580,128) 10,512,961 (28,075,680) (17,562,719) (21,142,847) 171,466,794	Year Ended 12/31/17  \$ 9,224,509 3,799,369 — (393,327) (581,989)  20,104 (52,033) 12,016,633  10,757,345 (19,957,641) (9,200,296) 2,816,337	

	Flexibly Ma	naged Fund	Balance	d Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
ncrease (Decrease) in Net Assets Operations:				
Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on purchased options	\$ 89,026,940 221,193,953 4,177,995	\$ 39,912,610 264,534,393	\$ (158,831) 7,340,398	\$ (151,658) 6,445,348
Net realized gain (loss) on written options  Net realized gain (loss) on foreign currencies  Net change in unrealized appreciation (depreciation) of investments, futures	1,296,968 47,840	6,796,201 72,674		_
contracts and foreign currencies	(328,285,354) (2,381,269) 38,717,601	239,631,557 — (28,857,557)	(9,285,064) — —	4,529,226 —
Net Increase (Decrease) in Net Assets Resulting from Operations	23,794,674	522,089,878	(2,103,497)	10,822,916
apital Share Transactions (1):				
Shares issued	44,963,034 (268,804,302)	99,323,917 (217,712,470)	2,793,291 (10,261,420)	4,702,427 (8,923,131)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	(223,841,268)	(118,388,553)	(7,468,129)	(4,220,704)
Total Increase (Decrease)	(200,046,594)	403,701,325	(9,571,626)	6,602,212
let Assets:  Beginning of period	3,898,296,829	3,494,595,504	84,403,453	77,801,241
End of period	\$3,698,250,235	\$3,898,296,829(a	. <del></del>	\$84,403,453
a) Includes undistributed net investment loss at end of year of \$(26,835).  1) Shares Issued and Redeemed:		<u></u> `	^ <u></u>	
Shares issued	837,156	2,029,060	137,432	249,232
Shares redeemed	(4,996,105) (4,158,949)	(4,413,141) (2,384,081)	(501,881)	(473,606) (224,374)
	(1,150,515)	(2,50 1,00 1)		
	Large Growtl	h Stock Fund	Large Cap Gr	owth Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
ncrease (Decrease) in Net Assets				
Net realized gain (loss) on forward foreign currency contracts  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts	\$ (173,836) 36,075,459 (1,907)	\$ (221,061) 52,300,511 1,593	\$ 236,110 5,067,671 (2,957) 2,101	\$ 223,528 3,296,050 568 —
Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies	(37,694,955)	29,728,337	(4,596,077)	9,067,622
Net Increase (Decrease) in Net Assets Resulting from Operations	(1,795,239)	81,809,380	706,848	12,587,768
Capital Share Transactions (1):  Shares issued	15,239,087	15,281,456	6,027,806	11,365,550
Shares redeemed	(37,900,582)	(49,237,621)	(11,679,501)	(8,355,538)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	(22,661,495)	(33,956,165)	(5,651,695)	3,010,012
Total Increase (Decrease)	(24,456,734)	47,853,215	(4,944,847)	15,597,780
et Assets:	307,131,255	259,278,040	58,388,727	42,790,947
Beginning of period		ė 307 131 255/h	) \$ 53,443,880	\$58,388,727(
End of period	\$ 282,674,521	3 307, 13 1,233(0	, <u> ,                              </u>	
End of period	\$ 282,674,521	<u>* 307,131,233</u> (D		
End of period	\$ 282,674,521	419,408	320,123	715,424
End of period				715,424 (517,075) 198,349

	Large Core C	irowth Fund	Large Cap \	/alue Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets Operations:				
Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures	\$ (119,646) 14,866,012 1,244 (8,865)	\$ (202,309) 17,286,080 24,359 —	\$ 2,373,356 45,011,251 —	\$ 3,188,193 11,794,859 — —
contracts and foreign currencies	(10,094,918)	15,012,269	(62,082,127)	12,676,112
Net Increase (Decrease) in Net Assets Resulting from Operations	4,643,827	32,120,399	(14,697,520)	27,659,164
Capital Share Transactions (1): Shares issued Shares redeemed	7,252,351 (18,024,928)	6,298,912 (14,946,490)	22,876,266 (29,956,659)	9,963,719 (38,956,998)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	(10,772,577)	(8,647,578)	(7,080,393)	(28,993,279)
Total Increase (Decrease)	(6,128,750)	23,472,821	(21,777,913)	(1,334,115)
Beginning of period	124,493,260	101,020,439	201,218,504	202,552,619
End of period	\$118,364,510	\$124,493,260	\$179,440,591	\$201,218,504(a)
(a) Includes undistributed net investment loss at end of year of \$(1,343,191).  (1) Shares Issued and Redeemed: Shares issued Shares redeemed	302,245 (764,611)	341,403 (787,744)	807,607 (1,045,816)	383,981 (1,473,725)
Shares redecined	(462,366)	(446,341)	(238,209)	(1,089,744)
	(102,500)	(110,511)	(250,205)	(1,000,711)
	Laura Cara	Mala E a d		_
	Large Core	Value Fund	Index 50	00 Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	00 Fund Year Ended 12/31/17
Increase (Decrease) in Net Assets	Year Ended	Year Ended	Year Ended	Year Ended
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures	Year Ended	Year Ended	Year Ended	Year Ended
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678)	Year Ended 12/31/17 \$ 2,840,612 20,426,776 5,464,228	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957)	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures	Year Ended 12/31/18 \$ 2,873,672 21,239,641	Year Ended 12/31/17 \$ 2,840,612 20,426,776	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192)	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272)	Year Ended 12/31/17 \$ 2,840,612 20,426,776 	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744)	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749)
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272) (29,042,457)	Year Ended 12/31/17 \$ 2,840,612 20,426,776 — 5,464,228 28,731,616 26,532,659 (30,436,727) (3,904,068)	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744) (49,559,367)	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749) (36,308,742)
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272)	Year Ended 12/31/17 \$ 2,840,612 20,426,776 	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744)	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749)
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272) (29,042,457)	Year Ended 12/31/17 \$ 2,840,612 20,426,776 — 5,464,228 28,731,616 26,532,659 (30,436,727) (3,904,068)	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744) (49,559,367)	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749) (36,308,742)
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272) (29,042,457) (40,141,822)	Year Ended 12/31/17 \$ 2,840,612 20,426,776 5,464,228 28,731,616 26,532,659 (30,436,727) (3,904,068) 24,827,548	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744) (49,559,367) (68,885,484) 485,749,826	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749) (36,308,742) 52,877,085
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272) (29,042,457) (40,141,822) 216,213,806	Year Ended 12/31/17 \$ 2,840,612 20,426,776 — 5,464,228 28,731,616 26,532,659 (30,436,727) (3,904,068) 24,827,548 191,386,258	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744) (49,559,367) (68,885,484) 485,749,826	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749) (36,308,742) 52,877,085 432,872,741
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period (b) Includes undistributed net investment loss at end of year of \$(15,678). (1) Shares Issued and Redeemed:	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272) (29,042,457) (40,141,822) 216,213,806 \$176,071,984	Year Ended 12/31/17 \$ 2,840,612 20,426,776 	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744) (49,559,367) (68,885,484) 485,749,826 ) \$416,864,342	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749) (36,308,742) 52,877,085 432,872,741 \$485,749,826
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period (b) Includes undistributed net investment loss at end of year of \$(15,678).	Year Ended 12/31/18 \$ 2,873,672 21,239,641 (35,212,678) (11,099,365) 9,421,815 (38,464,272) (29,042,457) (40,141,822) 216,213,806	Year Ended 12/31/17 \$ 2,840,612 20,426,776 — 5,464,228 28,731,616 26,532,659 (30,436,727) (3,904,068) 24,827,548 191,386,258	Year Ended 12/31/18 \$ 7,526,956 34,390,076 (175,192) (61,067,957) (19,326,117) 23,774,377 (73,333,744) (49,559,367) (68,885,484) 485,749,826	Year Ended 12/31/17 \$ 7,549,335 16,561,274 628,298 64,446,920 89,185,827 20,174,007 (56,482,749) (36,308,742) 52,877,085 432,872,741

	Mid Cap Gr	owth Fund	Mid Cap V	alue Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets				
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on purchased options	\$ (357,178) 10,052,924 (110,200)	\$ (226,850) 3,025,856	\$ 1,469,897 17,904,839	\$ 1,448,336 19,941,327
Net realized gain (loss) on written options	54,582 248	88,583 488		_
contracts and foreign currencies  Net change in unrealized appreciation (depreciation) on purchased options  Net change in unrealized appreciation (depreciation of written options	(8,408,400) 8,499 6,397	24,110,350 — (6,397)	(44,175,166) — —	6,769,115 — —
Net Increase (Decrease) in Net Assets Resulting from Operations	1,246,872	26,992,030	(24,800,430)	28,158,778
Capital Share Transactions (1):				
Shares issued Shares redeemed	10,493,912 (20,527,297)	5,733,644 (14,761,700)	7,809,360 (21,933,682)	7,649,254 (25,486,253)
Net Increase (Decrease) in Net Assets from Capital Share Transactions $\dots$	(10,033,385)	(9,028,056)	(14,124,322)	(17,836,999)
Total Increase (Decrease)	(8,786,513)	17,963,974	(38,924,752)	10,321,779
Net Assets:  Beginning of period	121,288,487	103,324,513	180,696,156	170,374,377
End of period	\$112,501,974	\$121,288,487(a		\$180,696,156(
a) Includes undistributed net investment loss at end of year of \$(12,283) and \$(756,	185), respectivel	y.	, <del>-                                   </del>	<del></del>
1) Shares Issued and Redeemed:				
Shares issued Shares redeemed	506,448 (984,438)	346,870 (874,621)	312,155 (819,626)	305,828 (1,032,435
	(477,990)	(527,751)	(507,471)	(726,607
	Mid Core \	/alue Fund	SMID Cap G	rowth Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
ncrease (Decrease) in Net Assets	Ended	Year Ended	Year Ended	Year Ended
Operations:         Net investment income (loss)           Net realized gain (loss) on investment transactions	Ended	Year Ended 12/31/17 \$ 1,410,956 9,955,899	Year Ended	Year Ended 12/31/17 \$ (284,263)
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on written options  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts	Ended 12/31/18 \$ 1,082,476	Year Ended 12/31/17 \$ 1,410,956	Year Ended 12/31/18 \$ (235,752)	Year Ended 12/31/17 \$ (284,263)
Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on written options  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign	\$ 1,082,476 8,689,770 (2,541)	Year Ended 12/31/17 \$ 1,410,956 9,955,899 532	Year Ended 12/31/18 \$ (235,752)	Year Ended 12/31/17 \$ (284,263)
Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on written options  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675	\$ 1,410,956 9,955,899 532 (112,874) (663,762) (35,789)	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17 \$ (284,263) 5,283,529 ————————————————————————————————————
Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on written options  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952)	Year Ended 12/31/17 \$ 1,410,956 9,955,899 532 (112,874) — (663,762)	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17 \$ (284,263) 5,283,529
Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on written options  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on foreign currency contracts  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign currency contracts  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058	Year Ended 12/31/17 \$ 1,410,956 9,955,899 532 (112,874) — (663,762) (35,789) 10,554,962	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17 \$ (284,263) 5,283,529 
Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currency contracts Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887)	Year Ended 12/31/17 \$ 1,410,956 9,955,899 532 (112,874) — (663,762) (35,789) 10,554,962 11,498,954 (19,219,418)	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17 \$ (284,263) 5,283,529 
Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net lncrease (Decrease) in Net Assets Resulting from Operations  Appital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887) (8,083,829)	\$ 1,410,956 9,955,899 532 (112,874) (663,762) (35,789) 10,554,962 11,498,954 (19,219,418) (7,720,464)	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17 \$ (284,263' 5,283,529 
Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Lapital Share Transactions (1): Shares issued Shares redeemed  Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887) (8,083,829) (19,718,942)	Year Ended 12/31/17  \$ 1,410,956 9,955,899 532 (112,874) (663,762) (35,789) 10,554,962  11,498,954 (19,219,418) (7,720,464) 2,834,498	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17  \$ (284,263) 5,283,529  9,369,546  14,368,812  8,411,675 (10,710,035) (2,298,360) 12,070,452
Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed  Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease) Net Assets: Beginning of period	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887) (8,083,829) (19,718,942)	Year Ended 12/31/17  \$ 1,410,956 9,955,899 532 (112,874) (663,762) (35,789) 10,554,962  11,498,954 (19,219,418) (7,720,464) 2,834,498 96,176,574	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17  \$ (284,263) 5,283,529  9,369,546  14,368,812  8,411,675 (10,710,035) (2,298,360) 12,070,452  52,712,569
Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease) Net Assets: Beginning of period End of period  End of period  (b) Includes undistributed net investment income at end of year of \$11,280.	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887) (8,083,829) (19,718,942)	Year Ended 12/31/17  \$ 1,410,956 9,955,899 532 (112,874) (663,762) (35,789) 10,554,962  11,498,954 (19,219,418) (7,720,464) 2,834,498 96,176,574	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17 \$ (284,263; 5,283,529 
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease) Net Assets: Beginning of period End of period (b) Includes undistributed net investment income at end of year of \$11,280.	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887) (8,083,829) (19,718,942)	Year Ended 12/31/17  \$ 1,410,956 9,955,899 532 (112,874) (663,762) (35,789) 10,554,962  11,498,954 (19,219,418) (7,720,464) 2,834,498 96,176,574	Year Ended 12/31/18 \$ (235,752) 8,994,654 ————————————————————————————————————	Year Ended 12/31/17  \$ (284,263 5,283,529 9,369,546 ————————————————————————————————————
Net realized gain (loss) on investment transactions Net realized gain (loss) on written options Net realized gain (loss) on foreign currencies Net realized gain (loss) on foreign currency contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net change in unrealized appreciation (depreciation) of forward foreign currency contracts Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease) Net Assets: Beginning of period End of period (b) Includes undistributed net investment income at end of year of \$11,280. (1) Shares Issued and Redeemed:	\$ 1,082,476 8,689,770 (2,541) 203,459 (21,620,952) 12,675 (11,635,113) 5,645,058 (13,728,887) (8,083,829) (19,718,942) 99,011,072 \$ 79,292,130	Year Ended 12/31/17  \$ 1,410,956 9,955,899 532 (112,874) — (663,762) (35,789) 10,554,962  11,498,954 (19,219,418) (7,720,464) 2,834,498  96,176,574 \$ 99,011,072(b)	Year Ended 12/31/18  \$ (235,752) 8,994,654 (11,904,900) (3,145,998)  9,313,190 (11,068,549) (1,755,359) (4,901,357)  64,783,021 )\$ 59,881,664	Year Ended 12/31/17  \$ (284,263 5,283,529 9,369,546 ————————————————————————————————————

	SMID Cap \	/alue Fund	Small Cap G	rowth Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets Operations:				
Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on foreign currencies  Net change in unrealized appreciation (depreciation) of investments, futures	\$ 336,642 10,570,032 —	\$ 91,694 9,579,598 —	\$ (387,152) 10,582,439 260	\$ (438,429) 9,317,791 (240)
contracts and foreign currencies	(24,741,810)	342,825	(14,099,568)	12,011,603
Net Increase (Decrease) in Net Assets Resulting from Operations	(13,835,136)	10,014,117	(3,904,021)	20,890,725
Capital Share Transactions (1): Shares issued Shares redeemed	24,848,843 (15,418,102)	10,650,054 (17,372,897)	10,662,667 (15,895,475)	7,745,801 (12,214,813)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	9,430,741	(6,722,843)	(5,232,808)	(4,469,012)
Total Increase (Decrease)	(4,404,395)	3,291,274	(9,136,829)	16,421,713
Net Assets:				
Beginning of period	85,323,012	82,031,738	102,379,872	85,958,159
End of period	\$ 80,918,617	\$ 85,323,012	\$ 93,243,043	\$102,379,872(a)
(a) Includes undistributed net investment loss at end of year of \$(209).				
(1) Shares Issued and Redeemed: Shares issued Shares redeemed	912,594 (551,662) 360,932	419,265 (683,302) (264,037)	261,259 (380,158) (118,899)	222,734 (349,987) (127,253)
	Small Cap \	/alue Fund	Small Cap I	ndex Fund
	Year Ended 12/31/18	Yalue Fund Year Ended 12/31/17	Small Cap I Year Ended 12/31/18	ndex Fund Year Ended 12/31/17
Increase (Decrease) in Net Assets	Year Ended	Year Ended	Year Ended	Year Ended
Increase (Decrease) in Net Assets Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures	Year Ended	Year Ended	Year Ended	Year Ended
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies	Year Ended 12/31/18 \$ 1,177,178 20,932,520 — (55,561,077)	Year Ended 12/31/17 \$ 1,295,635 26,426,481 	Year Ended 12/31/18 \$ 485,242 6,674,810 59,986 (15,734,623)	Year Ended 12/31/17 \$ 478,567 5,566,136 20,741 3,869,412
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net Increase (Decrease) in Net Assets Resulting from Operations	Year Ended 12/31/18 \$ 1,177,178 20,932,520	Year Ended 12/31/17 \$ 1,295,635 26,426,481	Year Ended 12/31/18 \$ 485,242 6,674,810 59,986	Year Ended 12/31/17 \$ 478,567 5,566,136 20,741
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies	Year Ended 12/31/18 \$ 1,177,178 20,932,520 — (55,561,077)	Year Ended 12/31/17 \$ 1,295,635 26,426,481 	Year Ended 12/31/18 \$ 485,242 6,674,810 59,986 (15,734,623)	Year Ended 12/31/17 \$ 478,567 5,566,136 20,741 3,869,412
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued	Year Ended 12/31/18 \$ 1,177,178 20,932,520 ————————————————————————————————————	Year Ended 12/31/17 \$ 1,295,635 26,426,481 — 1,386,810 29,108,926 21,124,435	Year Ended 12/31/18 \$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200	Year Ended 12/31/17 \$ 478,567 5,566,136 20,741 3,869,412 9,934,856 8,867,032
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on futures contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued  Shares redeemed	\$ 1,177,178 20,932,520 (55,561,077) (33,451,379) 17,807,215 (35,798,757)	Year Ended 12/31/17 \$ 1,295,635 26,426,481 	\$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200 (13,781,178)	\$ 478,567 5,566,136 20,741 3,869,412 9,934,856 8,867,032 (13,518,493)
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)	\$ 1,177,178 20,932,520 (55,561,077) (33,451,379) 17,807,215 (35,798,757) (17,991,542) (51,442,921)	Year Ended 12/31/17 \$ 1,295,635 26,426,481	\$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200 (13,781,178) (2,399,978) (10,914,563)	\$ 478,567 5,566,136 20,741 3,869,412 9,934,856  8,867,032 (13,518,493) (4,651,461) 5,283,395
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period	\$ 1,177,178 20,932,520 (55,561,077) (33,451,379) 17,807,215 (35,798,757) (17,991,542) (51,442,921) 262,728,120	\$ 1,295,635 26,426,481 1,386,810 29,108,926 21,124,435 (32,473,040) (11,348,605) 17,760,321	\$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200 (13,781,178) (2,399,978) (10,914,563) 81,638,126	\$ 478,567 5,566,136 20,741 3,869,412 9,934,856 8,867,032 (13,518,493) (4,651,461) 5,283,395
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period	\$ 1,177,178 20,932,520 (55,561,077) (33,451,379) 17,807,215 (35,798,757) (17,991,542) (51,442,921)	Year Ended 12/31/17 \$ 1,295,635 26,426,481	\$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200 (13,781,178) (2,399,978) (10,914,563)	\$ 478,567 5,566,136 20,741 3,869,412 9,934,856  8,867,032 (13,518,493) (4,651,461) 5,283,395
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease) Net Assets: Beginning of period End of period  (b) Includes undistributed net investment loss at end of year of \$(24,066).	\$ 1,177,178 20,932,520 (55,561,077) (33,451,379) 17,807,215 (35,798,757) (17,991,542) (51,442,921) 262,728,120	\$ 1,295,635 26,426,481 1,386,810 29,108,926 21,124,435 (32,473,040) (11,348,605) 17,760,321	\$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200 (13,781,178) (2,399,978) (10,914,563) 81,638,126	\$ 478,567 5,566,136 20,741 3,869,412 9,934,856 8,867,032 (13,518,493) (4,651,461) 5,283,395
Operations: Net investment income (loss) Net realized gain (loss) on investment transactions Net realized gain (loss) on futures contracts Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period	\$ 1,177,178 20,932,520 (55,561,077) (33,451,379) 17,807,215 (35,798,757) (17,991,542) (51,442,921) 262,728,120	\$ 1,295,635 26,426,481 1,386,810 29,108,926 21,124,435 (32,473,040) (11,348,605) 17,760,321	\$ 485,242 6,674,810 59,986 (15,734,623) (8,514,585) 11,381,200 (13,781,178) (2,399,978) (10,914,563) 81,638,126	\$ 478,567 5,566,136 20,741 3,869,412 9,934,856 8,867,032 (13,518,493) (4,651,461) 5,283,395

	Developed II Index		International	Equity Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets				
Operations:  Net investment income (loss) .  Net realized gain (loss) on investment transactions .  Net realized gain (loss) on futures contracts  Net realized gain (loss) on foreign currencies	\$ 2,513,313 1,189,309 (342,153) (62,134)	\$ 2,223,918 1,440,794 272,563 19,775	\$ 2,261,356 40,077,391 — (135,919)	\$ 2,019,845 43,150,541 — (252,535)
Net realized gain (loss) on forward foreign currency contracts	(267)	10 510 091	(456,207)	E2 022 977
contracts and foreign currencies  Net Increase (Decrease) in Net Assets Resulting from Operations	(19,388,036) (16,089,968)	19,519,981 23,477,031	(84,337,632) (42,591,011)	52,932,877 <b>97,850,728</b>
	(10,000,000)	25,177,051	(12,551,011)	77,030,720
Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)	12,149,439 (14,518,453) (2,369,014) (18,458,982)	10,428,887 (14,788,233) (4,359,346) 19,117,685	15,623,800 (51,961,438) (36,337,638) (78,928,649)	17,975,173 (59,327,188) (41,352,015) 56,498,713
Met Assets.				
Net Assets:  Beginning of period  End of period	116,930,413 \$ 98,471,431	97,812,728 \$116,930,413(a	375,821,067 ) \$296,892,418	319,322,354 \$375,821,067(a
(a) Includes undistributed net investment loss at end of year of \$(1,272,653) and \$(2	,607,509), respec	tively.		
(1) Shares Issued and Redeemed: Shares issued Shares redeemed Shares redeemed	881,613 (1,046,984) (165,371)	810,612 (1,150,366) (339,754)	535,648 (1,753,809) (1,218,161)	715,503 (2,194,741) (1,479,238)
	Emerging Equity		Real Estate Se	curities Fund
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets				
Operations:  Net investment income (loss)  Net realized gain (loss) on investment transactions  Net realized gain (loss) on foreign currencies  Net realized gain (loss) on forward foreign currency contracts  Net change in unrealized appreciation (depreciation) of investments, futures contracts and foreign currencies  Net change in unrealized appreciation (depreciation) of forward foreign	\$ 1,238,255 12,285,256 (11,223) 380,389 (45,234,597)	\$ 428,918 10,678,731 106,172 (87,347) 40,252,475	\$ 2,616,656 4,807,690 — — (12,543,521)	\$ 2,595,313 4,925,259 — — 2,471,183
currency contracts	_	(41,283)	_	_
Net Increase (Decrease) in Net Assets Resulting from Operations	(31,341,920)	51,337,666	(5,119,175)	9,991,755
Capital Share Transactions (1): Shares issued Shares redeemed	22,675,525 (28,717,460)	12,952,672 (30,203,658)	5,919,254 (24,276,489)	9,350,409 (18,756,594)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	(6,041,935)	(17,250,986)	(18,357,235)	(9,406,185)
·	(37,383,855)	34,086,680	(23,476,410)	585,570
Total Increase (Decrease)  Net Assets:  Beginning of period	184,356,503 \$146,972,648	150,269,823 \$184,356,503(b	137,842,126 3) \$114,365,716	137,256,556 \$137,842,126
Total Increase (Decrease)	184,356,503 \$146,972,648	150,269,823 \$184,356,503(b	. ———	137,256,556 \$137,842,126

	Aggressive Al	location Fund	Moderately Allocation	
	Year Ended 12/31/18	Year Ended 12/31/17	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets Operations:				
Net investment loss  Net realized gain (loss) affiliated investment transactions  Net change in unrealized appreciation (depreciation) of affiliated investments	\$ (231,621) 6,339,269 (12,907,243)	\$ (210,274) 5,450,349 7,069,260	\$ (723,890) 26,371,720 (44,118,799)	\$ (747,473) 19,312,315 22,880,712
Net Increase (Decrease) in Net Assets Resulting from Operations	(6,799,595)	12,309,335	(18,470,969)	41,445,554
Capital Share Transactions (1):				
Shares issued	4,910,588 (8,585,976)	9,407,157 (8,504,700)	4,387,154 (34,696,555)	19,353,774 (24,343,783)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	(3,675,388)	902,457	(30,309,401)	(4,990,009)
Total Increase (Decrease)	(10,474,983)	13,211,792	(48,780,370)	36,455,545
Net Assets: Beginning of period	75,079,188	61,867,396	266,698,695	230,243,150
End of period	\$ 64,604,205	\$ 75,079,188	\$217,918,325	\$266,698,695
(1) Shares Issued and Redeemed: Shares issued	258,171	526,913	222,830	1,124,486
Stidies redeemed	(448,319)	(484,805)	(1,758,352)	(1,329,963)
	(190,148)	42,108	(1,535,522)	(205,477)
	Moderate All	ocation Fund	Moderately ( Allocation	
	Year Ended	Year Ended	Allocation Year Ended	Year Ended
Increase (Decrease) in Net Assets	Year	Year	Allocatio Year	on Fund Year
Increase (Decrease) in Net Assets Operations: Net investment loss	Year Ended	Year Ended	Allocation Year Ended	Year Ended
Operations:  Net investment loss	Year Ended 12/31/18 \$ (952,916) 28,132,709	Year Ended 12/31/17 \$ (987,210) 31,159,879	Allocation Year Ended 12/31/18  \$ (287,663) 7,097,540	year Ended 12/31/17 \$ (294,171) 8,708,703
Operations:  Net investment loss  Net realized gain (loss) on affiliated investment transactions  Net change in unrealized appreciation (depreciation) of affiliated investments  Net Increase (Decrease) in Net Assets Resulting from Operations	Year Ended 12/31/18 \$ (952,916) 28,132,709 (45,299,219)	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793	Allocation Year Ended 12/31/18 \$ (287,663) 7,097,540 (10,061,170)	Year Ended 12/31/17 \$ (294,171) 8,708,703 971,379
Operations:  Net investment loss	Year Ended 12/31/18 \$ (952,916) 28,132,709 (45,299,219) (18,119,426)	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462	\$ (287,663) 7,097,540 (10,061,170) (3,251,293)	\$ (294,171) 8,708,703 971,379 9,385,911 5,269,876
Operations:  Net investment loss  Net realized gain (loss) on affiliated investment transactions  Net change in unrealized appreciation (depreciation) of affiliated investments  Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1):  Shares issued	Year Ended 12/31/18 \$ (952,916) 28,132,709 (45,299,219) (18,119,426)	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462	\$ (287,663) 7,097,540 (10,061,170) (3,251,293)	\$ (294,171) 8,708,703 971,379 9,385,911
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed	\$ (952,916) 28,132,709 (45,299,219) (18,119,426)  6,839,230 (39,757,796)	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668)	\$ (287,663) 7,097,540 (10,061,170) (3,251,293) 6,618,291 (12,854,172)	\$ (294,171) 8,708,703 971,379 9,385,911 5,269,876 (13,982,773)
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)	Year Ended 12/31/18 \$ (952,916) 28,132,709 (45,299,219) (18,119,426) 6,839,230 (39,757,796) (32,918,566) (51,037,992)	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668) (34,005,158) 10,309,304	\$\text{ (287,663)} \\ 7,097,540 \\ (10,061,170) \\ (3,251,293) \end{array}\$	\$ (294,171) 8,708,703 971,379 9,385,911 5,269,876 (13,982,773) (8,712,897) 673,014
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period	\$ (952,916) 28,132,709 (45,299,219) (18,119,426) 6,839,230 (39,757,796) (32,918,566) (51,037,992) 342,656,075	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668) (34,005,158) 10,309,304 332,346,771	\$\text{ (287,663) } \text{ 7,097,540 } \text{ (10,061,170) } \text{ (3,251,293)} \text{ 6,618,291 } \text{ (12,854,172) } \text{ (6,235,881) } \text{ (9,487,174) } \text{ 98,414,371}	\$\frac{\text{Year}}{8,708,703} \\ \frac{\text{94,171}}{9,385,911} \\ \frac{\text{5,269,876}}{(13,982,773)} \\ \frac{\text{(8,712,897)}}{673,014} \\ \frac{\text{97,741,357}}{\text{97,741,357}}
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period	Year Ended 12/31/18 \$ (952,916) 28,132,709 (45,299,219) (18,119,426) 6,839,230 (39,757,796) (32,918,566) (51,037,992)	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668) (34,005,158) 10,309,304	\$\text{ (287,663) } \text{ 7,097,540 } \text{ (10,061,170) } \text{ (3,251,293)} \text{ 6,618,291 } \text{ (12,854,172) } \text{ (6,235,881) } \text{ (9,487,174) } \text{ 98,414,371}	\$\frac{\text{Year}}{8,708,703} \\ \frac{\text{94,171}}{9,385,911} \\ \frac{\text{5,269,876}}{(13,982,773)} \\ \frac{\text{(8,712,897)}}{673,014} \\ \frac{\text{97,741,357}}{\text{97,741,357}}
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period  (1) Shares Issued and Redeemed:	\$ (952,916) 28,132,709 (45,299,219) (18,119,426)  6,839,230 (39,757,796) (32,918,566) (51,037,992)  342,656,075 \$291,618,083	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668) (34,005,158) 10,309,304 332,346,771 \$342,656,075	\$\text{ (287,663)} \\ 7,097,540 \\ (10,061,170) \\ (3,251,293) \end{array}\$\tag{6,618,291} \\ (12,854,172) \\ (6,235,881) \\ (9,487,174) \\ \frac{98,414,371}{\$88,927,197}\$\end{array}\$	\$\frac{\( \) \text{Year} \\ \text{Ended} \\ \) \text{12/31/17} \\ \$\( \) \( \)
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period	\$ (952,916) 28,132,709 (45,299,219) (18,119,426) 6,839,230 (39,757,796) (32,918,566) (51,037,992) 342,656,075	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668) (34,005,158) 10,309,304 332,346,771	\$\text{ (287,663) } \text{ 7,097,540 } \text{ (10,061,170) } \text{ (3,251,293)} \text{ 6,618,291 } \text{ (12,854,172) } \text{ (6,235,881) } \text{ (9,487,174) } \text{ 98,414,371}	\$\frac{\text{Year}}{8,708,703} \\ \frac{\text{94,171}}{9,385,911} \\ \frac{\text{5,269,876}}{(13,982,773)} \\ \frac{\text{(8,712,897)}}{673,014} \\ \frac{\text{97,741,357}}{\text{97,741,357}}
Operations: Net investment loss Net realized gain (loss) on affiliated investment transactions Net change in unrealized appreciation (depreciation) of affiliated investments Net Increase (Decrease) in Net Assets Resulting from Operations  Capital Share Transactions (1): Shares issued Shares redeemed Net Increase (Decrease) in Net Assets from Capital Share Transactions Total Increase (Decrease)  Net Assets: Beginning of period End of period  (1) Shares Issued and Redeemed: Shares issued	\$ (952,916) 28,132,709 (45,299,219) (18,119,426)  6,839,230 (39,757,796) (32,918,566) (51,037,992)  342,656,075 \$291,618,083	Year Ended 12/31/17 \$ (987,210) 31,159,879 14,141,793 44,314,462 7,638,510 (41,643,668) (34,005,158) 10,309,304 332,346,771 \$342,656,075	\$\text{ (287,663)} \\ 7,097,540 \\ (10,061,170) \\ (3,251,293) \end{array}\$ \$\frac{6,618,291}{(12,854,172)} \\ (6,235,881) \\ (9,487,174) \\ \frac{88,927,197}{417,209}\$	\$\frac{\text{Year}}{\text{Ended}} \frac{12/31/17}{\text{\$12/31/17}} \$\\$  \text{\$(294,171)} \\ 8,708,703 \\ 971,379 \\  \text{\$9385,911}\$ \$\frac{5,269,876}{(13,982,773)} \\  \text{\$(8,712,897)} \\  \text{\$673,014}\$ \$\frac{97,741,357}{\text{\$98,414,371}}\$ \$ \text{\$345,417}\$

	Conservative A	llocation Fund
	Year Ended 12/31/18	Year Ended 12/31/17
Increase (Decrease) in Net Assets Operations:		
Net investment loss  Net realized gain (loss) on affiliated investment transactions  Net change in unrealized appreciation (depreciation) of affiliated investment transactions	\$ (178,329) 3,191,807 (3,779,634)	\$ (179,026) 3,412,357 310,904
Net Increase (Decrease) in Net Assets Resulting from Operations	(766,156)	3,544,235
Capital Share Transactions (1): Shares issued Shares redeemed	8,235,287 (9,036,706)	8,835,685 (9,812,724)
Net Increase (Decrease) in Net Assets from Capital Share Transactions	(801,419)	(977,039)
Total Increase (Decrease)	(1,567,575)	2,567,196
Net Assets:  Beginning of period  End of period	58,659,490 \$57,091,915	56,092,294 \$58,659,490
(1) Shares Issued and Redeemed: Shares issued Shares redeemed	582,959 (639,328) (56,369)	641,587 (712,996) (71,409)

### MONEY MARKET FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Income from investment operations:  Net investment income (loss) <sup>2</sup>	0.01	(a	)(a	(a)	(a)
Total from investment operations	0.01				
Less distributions: Net investment income	(0.01)	(a	)(a	(a)	(a)
Total distributions	(0.01)				
Net asset value, end of period	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Total return <sup>1</sup>	0.55%	0.01%	0.01%	0.01%	0.01%
Ratios/Supplemental data:  Net assets, end of period (in thousands)	\$ 110,933	\$ 91,567	\$123,865	\$133,645	\$132,731
Ratio of net expenses to average net assets <sup>3</sup>	1.26%	0.85%	0.45%	0.23%	0.12%
Ratio of total expenses to average net assets <sup>4</sup>	0.59%	0.59%	0.58%	0.61%	0.57%
Ratio of net investment income (loss) to average net assets <sup>3</sup>	0.55%	0.01%	0.01%	0.01%	0.01%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

(a) Less than one penny per share.

### LIMITED MATURITY BOND FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 12.09	\$ 11.89	\$ 11.59	\$ 11.50	\$ 11.48
Income from investment operations:					
Net investment income (loss) <sup>2</sup>	0.32	0.24	0.18	0.13	0.08
Net realized and unrealized gain (loss) on investment transactions	(0.15)	(0.04)	0.12	(0.04)	(0.06)
Total from investment operations	0.17	0.20	0.30	0.09	0.02
Net asset value, end of period	\$ 12.26	\$ 12.09	\$ 11.89	\$ 11.59	\$ 11.50
Total return <sup>1</sup>	1.41%	1.68%	2.59%	0.78%	0.17%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 233,216	\$229,184	\$210,476	\$189,846	\$222,062
Ratio of total expenses to average net assets	0.70%	0.70%	0.70%	0.73%	0.67%
Ratio of net investment income (loss) to average net assets	2.61%	1.98%	1.55%	1.10%	0.67%
Portfolio turnover rate	79%	97%	105%	127%	82%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

<sup>&</sup>lt;sup>4</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

## **QUALITY BOND FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 14.68	\$ 14.03	\$ 13.45	\$ 13.40	\$ 12.75
Income from investment operations:					
Net investment income (loss) <sup>2</sup>	0.41	0.36	0.36	0.33	0.26
Net realized and unrealized gain (loss) on investment transactions	(0.43)	0.29	0.22	(0.28)	0.39
Total from investment operations	(0.02)	0.65	0.58	0.05	0.65
Net asset value, end of period	\$ 14.66	\$ 14.68	\$ 14.03	\$ 13.45	\$ 13.40
Total return <sup>1</sup>	(0.14%)	4.63%	4.31%	0.37%	5.10%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 409,027	\$485,598	\$504,849	\$534,675	\$559,616
Ratio of total expenses to average net assets	0.66%	0.66%	0.66%	0.68%	0.64%
Ratio of net investment income (loss) to average net assets	2.81%	2.48%	2.58%	2.46%	1.95%
Portfolio turnover rate	59%	72%	77%	131%	135%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### HIGH YIELD BOND FUND

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 13.18	\$ 12.29	\$ 10.61	\$ 10.98	\$ 10.78
Income (loss) from investment operations:					
Net investment income (loss) <sup>2</sup>	0.66	0.69	0.69	0.66	0.62
Net realized and unrealized gain (loss) on investment transactions	(0.96)	0.20	0.99	(1.03)	(0.42)
Total from investment operations	(0.30)	0.89	1.68	(0.37)	0.20
Net asset value, end of period	\$ 12.88	\$ 13.18	\$ 12.29	\$ 10.61	\$ 10.98
Total return <sup>1</sup>	(2.35%)	7.42%	15.83%	(3.37%)	1.86%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 150,324	\$171 <b>,</b> 467	\$168,650	\$173,033	\$194,504
Ratio of total expenses to average net assets	0.77%	0.86%	0.86%	0.87%	0.85%
Ratio of net investment income (loss) to average net assets	5.02%	5.39%	6.03%	5.88%	5.58%
Portfolio turnover rate	115%	78%	<u>81%</u>	72%	56%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### FLEXIBLY MANAGED FUND

For a share outstanding throughout each period

	Year Ended December 31,					
	2018	2017	2016	2015	2014	
Net asset value, beginning of period	\$ 52.31	\$ 45.44	\$ 42.05	\$ 40.04	\$ 35.72	
Income (loss) from investment operations:						
Net investment income (loss) 2	1.22	0.53	0.54	0.46	0.45	
Net realized and unrealized gain (loss) on investment transactions	(0.97)	6.34	2.85	1.55	3.87	
Total from investment operations	0.25	6.87	3.39	2.01	4.32	
Net asset value, end of period	\$ 52.56	\$ 52.31	\$ 45.44	\$ 42.05	\$ 40.04	
Total return <sup>1</sup>	0.48%	15.12%	8.06%	5.02%	12.09%	
Ratios/Supplemental data:						
Net assets, end of period (in thousands)	\$ 3,698,250	\$3,898,297	\$3,494,596	\$3,322,196	\$3,074,188	
Ratio of total expenses to average net assets	0.89%	0.89%	0.89%	0.92%	0.89%	
Ratio of net investment income (loss) to average net assets	2.28%	1.07%	1.24%	1.10%	1.18%	
Portfolio turnover rate	69%	61%	66%	69%	74%	

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### **BALANCED FUND**

For a share outstanding throughout each period

	Year Ended December 31,							
	2018	2017	2	016	2	2015		2014
Net asset value, beginning of period	\$ 20.12	\$ 17.60	\$	16.24	\$	16.13	\$	14.71
Income (loss) from investment operations:								
Net investment income (loss) <sup>3</sup>	(0.04)	,		(0.03)		(0.03)		(0.03)
Net realized and unrealized gain (loss) on investment transactions	(0.55)	2.56		1.39		0.14		1.45
Total from investment operations	(0.59)	2.52		1.36		0.11		1.42
Net asset value, end of period	\$ 19.53	\$ 20.12	\$	17.60	\$	16.24	\$	16.13
Total return <sup>1</sup>	(2.93%)	14.32%		8.37%		0.68%		9.65%
Ratios/Supplemental data:								
Net assets, end of period (in thousands)	\$ 74,832	\$ 84,403	\$	77,801	\$	76,587	\$	81,794
Ratio of net expenses to average net assets 2,4	0.20%	0.19%		0.19%		0.21%	_	0.20%
Ratio of total expenses to average net assets 2,5	0.20%	0.19%		0.19%		0.21%		0.21%
Ratio of net investment income (loss) to average net assets <sup>4</sup>	(0.19%)	(0.19%)		(0.19%)		(0.21%)		(0.20%)
Portfolio turnover rate	8%	9%		7%		8%		8%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The Fund also will indirectly bear its prorated share of expenses of the underlying funds. Such expenses are not included in the calculation of this ratio.

The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>4</sup> The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

<sup>&</sup>lt;sup>5</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

### LARGE GROWTH STOCK FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 40.48	\$ 30.40	\$ 30.07	\$ 27.21	\$ 25.11
Income (loss) from investment operations:					
Net investment income (loss) 2	(0.02)	(0.03)	(0.04)	(0.09)	(0.07)
Net realized and unrealized gain (loss) on investment transactions	(0.51)	10.11	0.37	2.95	2.17
Total from investment operations	(0.53)	10.08	0.33	2.86	2.10
Net asset value, end of period	\$ 39.95	\$ 40.48	\$ 30.40	\$ 30.07	\$ 27.21
Total return <sup>1</sup>	(1.31%)	33.16%	1.10%	10.51%	8.36%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 282,675	\$307,131	\$259,278	\$296,703	\$280,682
Ratio of total expenses to average net assets	0.95%	0.96%	0.96%	0.98%	0.96%
Ratio of net investment income (loss) to average net assets	(0.05%)	(0.08%)	(0.15%)	(0.30%)	(0.26%)
Portfolio turnover rate	42%	52%	42%	37%	38%

<sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### LARGE CAP GROWTH FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 17.78	\$ 13.87	\$ 13.09	\$ 13.11	\$ 11.78
Income (loss) from investment operations:					
Net investment income (loss) 2	0.08	0.07	0.07	0.05	0.06
Net realized and unrealized gain (loss) on investment transactions	0.04	3.84	0.71	(0.07)	1.27
Total from investment operations	0.12	3.91	0.78	(0.02)	1.33
Net asset value, end of period	\$ 17.90	\$ 17.78	\$ 13.87	\$ 13.09	\$ 13.11
Total return <sup>1</sup>	0.68%	28.19%	5.96%	(0.15%)	11.29%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 53,444	\$ 58,389	\$ 42,791	\$ 43,702	\$ 57,663
Ratio of net expenses to average net assets <sup>3</sup>	0.87%	0.89%	0.89%	0.89%	0.89%
Ratio of total expenses to average net assets <sup>4</sup>	0.87%	0.89%	0.89%	0.89%	0.90%
Ratio of net investment income (loss) to average net assets <sup>3</sup>	0.40%	0.43%	0.55%	0.39%	0.47%
Portfolio turnover rate	25%	28%	25%	29%	25%

<sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

<sup>&</sup>lt;sup>4</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

## LARGE CORE GROWTH FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 21.67	\$ 16.32	\$ 16.30	\$ 16.03	\$ 14.88
Income (loss) from investment operations:					
Net investment income (loss) 2	(0.02)	(0.03)	0.01	(0.03)	(0.03)
Net realized and unrealized gain (loss) on investment transactions	0.76	5.38	0.01	0.30	1.18
Total from investment operations	0.74	5.35	0.02	0.27	1.15
Net asset value, end of period	\$ 22.41	\$ 21.67	\$ 16.32	\$ 16.30	\$ 16.03
Total return <sup>1</sup>	3.42%	32.78%	0.12%	1.68%	7.73%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 118 <b>,</b> 365	\$124,493	\$101,020	\$111,680	\$125,980
Ratio of total expenses to average net assets	0.86%	0.86%	0.85%	0.87%	0.87%
Ratio of net investment income (loss) to average net assets	(0.09%)	(0.18%)	0.06%	(0.20%)	(0.19%)
Portfolio turnover rate	72%	64%	141%	124%	83%

<sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### LARGE CAP VALUE FUND

	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 28.41	\$ 24.79	\$ 22.21	\$ 23.22	\$ 20.86
Income (loss) from investment operations:					
Net investment income (loss) 2	0.35	0.41	0.36	0.27	0.30
Net realized and unrealized gain (loss) on investment transactions	(2.54)	3.21	2.22	(1.28)	2.06
Total from investment operations	(2.19)	3.62	2.58	(1.01)	2.36
Net asset value, end of period	\$ 26.22	\$ 28.41	\$ 24.79	\$ 22.21	\$ 23.22
Total return <sup>1</sup>	(7.71%)	14.60%	11.62%	(4.35%)	11.31%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 179,441	\$201,219	\$202,553	\$207,692	\$229,080
Ratio of total expenses to average net assets	0.90%	0.90%	0.90%	0.92%	0.90%
Ratio of net investment income (loss) to average net assets	1.22%	1.57%	1.60%	1.17%	1.38%
Portfolio turnover rate	108%	17%	22%	19%	22%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### LARGE CORE VALUE FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 18.64	\$ 16.18	\$ 14.77	\$ 14.89	\$ 13.38
Income (loss) from investment operations:					
Net investment income (loss) 2	0.26	0.25	0.22	0.22	0.19
Net realized and unrealized gain (loss) on investment transactions	(1.49)	2.21	1.19	(0.34)	1.32
Total from investment operations	(1.23)	2.46	1.41	(0.12)	1.51
Net asset value, end of period	\$ 17.41	\$ 18.64	\$ 16.18	\$ 14.77	\$ 14.89
Total return <sup>1</sup>	(6.60%)	15.21%	9.55%	(0.81%)	11.29%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 176,072	\$216,214	\$191,386	\$203,012	\$192,695
Ratio of total expenses to average net assets	0.90%	0.90%	0.90%	0.92%	0.91%
Ratio of net investment income (loss) to average net assets	1.39%	1.44%	1.47%	1.47%	1.33%
Portfolio turnover rate	76%	106%	87%	98%	80%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### **INDEX 500 FUND**

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 21.87	\$ 18.00	\$ 16.14	\$ 15.98	\$ 14.11
Income (loss) from investment operations:					
Net investment income (loss) 2	0.35	0.33	0.29	0.27	0.24
Net realized and unrealized gain (loss) on investment transactions	(1.39)	3.54	1.57	(0.11)	1.63
Total from investment operations	(1.04)	3.87	1.86	0.16	1.87
Net asset value, end of period	\$ 20.83	\$ 21.87	\$ 18.00	\$ 16.14	\$ 15.98
Total return <sup>1</sup>	(4.76%)	21.50%	11.52%	1.00%	13.25%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 416,864	\$485,750	\$432,873	\$417,965	\$442,835
Ratio of total expenses to average net assets	0.36%	0.36%	0.36%	0.38%	0.38%
Ratio of net investment income (loss) to average net assets	1.56%	1.64%	1.75%	1.68%	1.63%
Portfolio turnover rate	3%	2%	3%	3%	3%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### MID CAP GROWTH FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 18.96	\$ 14.92	\$ 14.02	\$ 14.88	\$ 13.59
Income (loss) from investment operations:					
Net investment income (loss) 2	(0.06)	(0.03)	(a)	(a)	(0.02)
Net realized and unrealized gain (loss) on investment transactions	0.11	4.07	0.90	(0.86)	1.31
Total from investment operations	0.05	4.04	0.90	(0.86)	1.29
Net asset value, end of period	\$ 19.01	\$ 18.96	\$ 14.92	\$ 14.02	\$ 14.88
Total return <sup>1</sup>	0.26%	27.08%	6.42%	(5.78%)	9.49%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 112 <b>,</b> 502	\$121 <b>,</b> 288	\$103,325	\$111,742	\$128,486
Ratio of total expenses to average net assets	0.96%	0.96%	0.97%	1.00%	0.97%
Ratio of net investment income (loss) to average net assets	(0.28%)	(0.20%)	0.00%	(0.02%)	(0.14%)
Portfolio turnover rate	42%	25%	28%	43%	140%

<sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

### MID CAP VALUE FUND

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 26.65	\$ 22.69	\$ 19.36	\$ 21.04	\$ 18.51
Income (loss) from investment operations:					
Net investment income (loss) 2	0.23	0.20	0.20	0.20	0.17
Net realized and unrealized gain (loss) on investment transactions	(4.28)	3.76	3.13	(1.88)	2.36
Total from investment operations	(4.05)	3.96	3.33	(1.68)	2.53
Net asset value, end of period	\$ 22.60	\$ 26.65	\$ 22.69	\$ 19.36	\$ 21.04
Total return <sup>1</sup>	(15.20%)	17.45%	17.20%	(7.98%)	13.67%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 141 <b>,</b> 771	\$180,696	\$170,374	\$165,849	\$185,293
Ratio of total expenses to average net assets	0.79%	0.78%	0.78%	0.81%	0.81%
Ratio of net investment income (loss) to average net assets	0.85%	0.83%	0.97%	0.93%	0.86%
Portfolio turnover rate	33%	31%	33%	42%	32%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>(</sup>a) Less than one penny per share.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

#### MID CORE VALUE FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 24.06	\$ 21.57	\$ 17.57	\$ 17.84	\$ 15.33
Income (loss) from investment operations:					
Net investment income (loss) 2	0.28	0.33	0.19	0.19	0.21
Net realized and unrealized gain (loss) on investment transactions	(3.42)	2.16	3.81	(0.46)	2.30
Total from investment operations	(3.14)	2.49	4.00	(0.27)	2.51
Net asset value, end of period	\$ 20.92	\$ 24.06	\$ 21.57	\$ 17.57	\$ 17.84
Total return <sup>1</sup>	(13.05%)	11.55%	22.77%	(1.51%)	16.37%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 79 <b>,</b> 292	\$99,011	\$96,177	\$90,550	\$90,229
Ratio of total expenses to average net assets	1.06%	1.02%	1.04%	1.07%	1.05%
Ratio of net investment income (loss) to average net assets	1.16%	1.48%	1.01%	1.06%	1.27%
Portfolio turnover rate	60%	45%	64%	77%	69%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### SMID CAP GROWTH FUND

For a share outstanding throughout each period

	Year Ended December 31,					
	2018	2017	2016	2015	2014	
Net asset value, beginning of period	\$ 26.38	\$ 20.68	\$ 19.46	\$ 19.76	\$ 19.64	
Income (loss) from investment operations:						
Net investment income (loss) <sup>2</sup>	(0.10)	(0.11)	(0.10)	(0.15)	(0.15)	
Net realized and unrealized gain (loss) on investment transactions	(1.35)	5.81	1.32	(0.15)	0.27	
Total from investment operations	(1.45)	5.70	1.22	(0.30)	0.12	
Net asset value, end of period	\$ 24.93	\$ 26.38	\$ 20.68	\$ 19.46	\$ 19.76	
Total return <sup>1</sup>	(5.50%)	27.56%	6.27%	(1.52%)	0.61%	
Ratios/Supplemental data:						
Net assets, end of period (in thousands)	\$ 59,882	\$64,783	\$52,713	\$56,002	\$55,602	
Ratio of net expenses to average net assets <sup>3</sup>	1.03%	1.05%	1.05%	1.07%	1.06%	
Ratio of total expenses to average net assets <sup>4</sup>	1.03%	1.04%	1.04%	1.07%	1.06%	
Ratio of net investment income (loss) to average net assets <sup>3</sup>	(0.35%)	(0.47%)	(0.52%)	(0.71%)	(0.81%)	
Portfolio turnover rate	83%	68%	160%	103%	89%	

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown

<sup>&</sup>lt;sup>4</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

### **SMID CAP VALUE FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 27.90	\$ 24.69	\$ 19.72	\$ 20.91	\$ 19.14
Income (loss) from investment operations:					
Net investment income (loss) 2	0.10	0.03	0.02	_	0.05
Net realized and unrealized gain (loss) on investment transactions	(4.33)	3.18	4.95	(1.19)	1.72
Total from investment operations	(4.23)	3.21	4.97	(1.19)	1.77
Net asset value, end of period	\$ 23.67	\$ 27.90	\$ 24.69	\$ 19.72	\$ 20.91
Total return <sup>1</sup>	(15.16%)	13.00%	25.20%	(5.69%)	9.25%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 80,919	\$ 85,323	\$82,032	\$67,959	\$ 73,906
Ratio of net expenses to average net assets <sup>3</sup>	1.10%	1.18%	1.21%	1.23%	1.20%
Ratio of total expenses to average net assets <sup>4</sup>	1.10%	1.18%	1.21%	1.23%	1.24%
Ratio of net investment income (loss) to average net assets <sup>3</sup>	0.36%	0.11%	0.10%	(0.02%)	0.24%
Portfolio turnover rate	47%	37%	62%	48%	51%

<sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

The net investment income (loss) per share was calculated using the average shares outstanding method.

### **SMALL CAP GROWTH FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 38.80	\$ 31.08	\$ 28.59	\$ 28.47	\$ 26.42
Income (loss) from investment operations:  Net investment income (loss) <sup>2</sup> Net realized and unrealized gain (loss) on investment transactions	(0.15) (1.65)	(0.16) 7.88	(0.10) 2.59	(0.14) 0.26	(0.11) 2.16
Total from investment operations	(1.80)	7.72	2.49	0.12	2.05
Net asset value, end of period	\$ 37.00	\$ 38.80	\$ 31.08	\$ 28.59	\$ 28.47
Total return <sup>1</sup>	(4.64%)	24.84%	8.71%	0.42%	7.76%
Ratios/Supplemental data: Net assets, end of period (in thousands)	\$ 93,243	\$102,380	\$85,958	\$91,666	\$102,678
Ratio of total expenses to average net assets	1.00%	1.01%	1.02%	1.03%	1.02%
Ratio of net investment income (loss) to average net assets	(0.36%)	(0.46%)	(0.35%)	(0.48%)	(0.42%)
Portfolio turnover rate	22%	25%	17%	26%	33%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

<sup>&</sup>lt;sup>4</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### **SMALL CAP VALUE FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 37.11	\$ 33.06	\$ 26.50	\$ 28.03	\$ 26.16
Income (loss) from investment operations:					
Net investment income (loss) 2	0.17	0.18	0.23	0.17	0.19
Net realized and unrealized gain (loss) on investment transactions	(5.32)	3.87	6.33	(1.70)	1.68
Total from investment operations	(5.15)	4.05	6.56	(1.53)	1.87
Net asset value, end of period	\$ 31.96	\$ 37.11	\$ 33.06	\$ 26.50	\$ 28.03
Total return <sup>1</sup>	(13.88%)	12.25%	24.75%	(5.46%)	7.15%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 211,285	\$262,728	\$244,968	\$227,139	\$246,127
Ratio of total expenses to average net assets	0.97%	0.97%	0.97%	0.99%	1.03%
Ratio of net investment income (loss) to average net assets	0.46%	0.56%	0.83%	0.62%	0.70%
Portfolio turnover rate	55%	59%	57%	47%	45%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

#### **SMALL CAP INDEX FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 22.86	\$ 20.09	\$ 16.69	\$ 17.59	\$ 16.88
Income (loss) from investment operations:					
Net investment income (loss) 2	0.14	0.13	0.12	0.12	0.12
Net realized and unrealized gain (loss) on investment transactions	(2.74)	2.64	3.28	(1.02)	0.59
Total from investment operations	(2.60)	2.77	3.40	(0.90)	0.71
Net asset value, end of period	\$ 20.26	\$ 22.86	\$ 20.09	\$ 16.69	\$ 17.59
Total return <sup>1</sup>	(11.37%)	13.79%	20.37%	(5.12%)	4.21%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 70,724	\$ 81,638	\$ 76 <b>,</b> 355	\$ 65,480	\$ 66,658
Ratio of net expenses to average net assets <sup>3</sup>	0.65%	0.65%	0.66%	0.69%	0.64%
Ratio of total expenses to average net assets <sup>4</sup>	0.65%	0.65%	0.66%	0.69%	0.69%
Ratio of net investment income (loss) to average net assets <sup>3</sup>	0.59%	0.62%	0.70%	0.66%	0.72%
Portfolio turnover rate	14%	13%	18%	18%	20%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

The net investment income (loss) per share was calculated using the average shares outstanding method.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown

<sup>&</sup>lt;sup>4</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

### **DEVELOPED INTERNATIONAL INDEX FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 14.22	\$ 11.42	\$ 11.38	\$ 11.54	\$ 12.29
Income (loss) from investment operations:					
Net investment income (loss) 2	0.31	0.27	0.26	0.24	0.30
Net realized and unrealized gain (loss) on investment transactions	(2.31)	2.53	(0.22)	(0.40)	(1.05)
Total from investment operations	(2.00)	2.80	0.04	(0.16)	(0.75)
Net asset value, end of period	\$ 12.22	\$ 14.22	\$ 11.42	\$ 11.38	\$ 11.54
Total return <sup>1</sup>	(14.07%)	24.52%	0.35%	(1.39%)	(6.10%)
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 98,471	\$116,930	\$ 97,813	\$ 98,109	\$101,510
Ratio of net expenses to average net assets <sup>3</sup>	0.79%	0.82%	0.81%	0.83%	0.75%
Ratio of total expenses to average net assets <sup>4</sup>	0.79%	0.82%	0.81%	0.83%	0.82%
Ratio of net investment income (loss) to average net assets <sup>3</sup>	2.24%	2.05%	2.35%	2.02%	2.47%
Portfolio turnover rate	3%	4%	7%	2%	7%

<sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

## INTERNATIONAL EQUITY FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 30.26	\$ 22.98	\$ 24.23	\$ 23.39	\$ 22.72
Income (loss) from investment operations:					
Net investment income (loss) 2	0.19	0.15	0.26	0.28	0.27
Net realized and unrealized gain (loss) on investment transactions	(3.94)	7.13	(1.51)	0.56	0.40
Total from investment operations	(3.75)	7.28	(1.25)	0.84	0.67
Net asset value, end of period	\$ 26.51	\$ 30.26	\$ 22.98	\$ 24.23	\$ 23.39
Total return <sup>1</sup>	(12.39%)	31.68%	(5.16%)	3.59%	2.95%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 296,892	\$375,821	\$319,322	\$375,175	\$380,898
Ratio of total expenses to average net assets	1.11%	1.12%	1.12%	1.15%	1.15%
Ratio of net investment income (loss) to average net assets	(0.66%)	0.56%	1.10%	1.17%	1.14%
Portfolio turnover rate	50%	32%	34%	27%	31%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

<sup>&</sup>lt;sup>4</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

<sup>&</sup>lt;sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### **EMERGING MARKETS EQUITY FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 13.80	\$ 10.22	\$ 9.66	\$ 10.84	\$ 11.40
Income (loss) from investment operations:					
Net investment income (loss) 2	0.09	0.03	0.03	0.03	0.02
Net realized and unrealized gain (loss) on investment transactions	(2.50)	3.55	0.53	(1.21)	(0.58)
Total from investment operations	(2.41)	3.58	0.56	(1.18)	(0.56)
Net asset value, end of period	\$ 11.39	\$ 13.80	\$ 10.22	\$ 9.66	\$ 10.84
Total return <sup>1</sup>	(17.46%)	35.03%	5.80%	(10.89%)	(4.91%)
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 146 <b>,</b> 973	\$184,357	\$150,270	\$147,819	\$157,027
Ratio of net expenses to average net assets <sup>3</sup>	1.32%	1.51%	1.65%	1.74%	1.75%
Ratio of total expenses to average net assets <sup>4</sup>	1.32%	1.51%	1.65%	1.68%	1.69%
Ratio of net investment income (loss) to average net assets <sup>3</sup>	0.73%	0.25%	0.28%	0.24%	0.19%
Portfolio turnover rate	45%	41%	46%	41%	42%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>2</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### **REAL ESTATE SECURITIES FUND**

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 21.47	\$ 19.99	\$ 18.95	\$ 18.01	\$ 13.83
Income (loss) from investment operations:					
Net investment income (loss) 2	0.43	0.39	0.32	0.26	0.23
Net realized and unrealized gain (loss) on investment transactions	(1.33)	1.09	0.72	0.68	3.95
Total from investment operations	(0.90)	1.48	1.04	0.94	4.18
Net asset value, end of period	\$ 20.57	\$ 21.47	\$ 19.99	\$ 18.95	\$ 18.01
Total return <sup>1</sup>	(4.19%)	7.40%	5.49%	5.22%	30.22%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 114 <b>,</b> 366	\$137 <b>,</b> 842	\$137,257	\$137,644	\$136,861
Ratio of total expenses to average net assets	0.96%	0.95%	0.95%	0.97%	0.97%
Ratio of net investment income (loss) to average net assets	2.05%	1.86%	1.65%	1.42%	1.43%
Portfolio turnover rate	66%	75%	81%	61%	54%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

The net investment income (loss) per share was calculated using the average shares outstanding method.

### AGGRESSIVE ALLOCATION FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018	2017	2017 2016		2014
Net asset value, beginning of period	\$ 19.20	\$ 15.99	\$ 14.88	\$ 15.12	\$ 14.16
Income (loss) from investment operations:  Net investment income (loss) <sup>3</sup>	(0.06) (1.77)	(0.05)	(0.05) 1.16	(0.05) (0.19)	(0.05) 1.01
Total from investment operations	(1.83)	3.21	1.11	(0.24)	0.96
Net asset value, end of period	\$ 17.37	\$ 19.20	\$ 15.99	\$ 14.88	\$ 15.12
Total return <sup>1</sup>	(9.53%)	20.08%	7.46%	(1.59%)	6.78%
Ratios/Supplemental data: Net assets, end of period (in thousands)	\$ 64,604	\$ 75,079	\$ 61,867	\$ 61,119	\$ 64,505
Ratio of net expenses to average net assets 2,4	0.32%	0.31%	0.32%	0.34%	0.34%
Ratio of total expenses to average net assets 2,5	0.32%	0.31%	0.32%	0.34%	0.34%
Ratio of net investment income (loss) to average net assets 4	(0.32%)	(0.31%)	(0.32%)	(0.34%)	(0.34%)
Portfolio turnover rate	19%	20%	20%	24%	20%

<sup>&</sup>lt;sup>1</sup> Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>2</sup> The Fund also will indirectly bear its prorated share of expenses of the underlying funds. Such expenses are not included in the calculation of this ratio.

<sup>3</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

#### MODERATELY AGGRESSIVE ALLOCATION FUND

For a share outstanding throughout each period

	Year Ended December 31,					
	2018	2017	2016	2015	2014	
Net asset value, beginning of period	\$ 19.66	\$ 16.72	\$ 15.55	\$ 15.73	\$ 14.80	
Income (loss) from investment operations:  Net investment income (loss) 3	(0.06) (1.48)	(0.05) 2.99	(0.05) 1.22	(0.05) (0.13)	(0.05) 0.98	
Total from investment operations	(1.54)	2.94	1.17	(0.18)	0.93	
Net asset value, end of period	\$ 18.12	\$ 19.66	\$ 16.72	\$ 15.55	\$ 15.73	
Total return <sup>1</sup>	(7.83%)	17.58%	7.52%	(1.14%)	6.28%	
Ratios/Supplemental data: Net assets, end of period (in thousands)	<u>\$ 217,918</u>	\$266,699	\$ 230,243	\$238,908	\$250,402	
Ratio of total expenses to average net assets <sup>2</sup>	0.30%	0.29%	0.30%	0.32%	0.32%	
Ratio of net investment income (loss) to average net assets	(0.29%)	(0.29%)	(0.30%)	(0.32%)	(0.32%)	
Portfolio turnover rate	14%	16%	14%	20%	17%	

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>4</sup> The ratio includes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were excluded, the ratio would have been higher (lower), respectively, than the ratio shown.

<sup>&</sup>lt;sup>5</sup> The ratio excludes expenses waived/reimbursed net of amount recaptured and fees paid indirectly, where applicable; if expenses waived/reimbursed net of amount recaptured and fees paid indirectly were included, the ratio would have been lower than the ratio shown.

<sup>&</sup>lt;sup>2</sup> The Fund also will indirectly bear its prorated share of expenses of the underlying funds. Such expenses are not included in the calculation of this ratio.

<sup>&</sup>lt;sup>3</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

### MODERATE ALLOCATION FUND

For a share outstanding throughout each period

	Year Ended December 31,				
	2018 2017		2016	2015	2014
Net asset value, beginning of period	\$ 17.51	\$ 15.36	\$ 14.36	\$ 14.44	\$ 13.67
Income (loss) from investment operations:					
Net investment income (loss) <sup>3</sup>	(0.05)	(0.05)	(0.04)	(0.05)	(0.04)
Net realized and unrealized gain (loss) on investment transactions	(0.98)	2.20	1.04	(0.03)	0.81
Total from investment operations	(1.03)	2.15	1.00	(0.08)	0.77
Net asset value, end of period	\$ 16.48	\$ 17.51	\$ 15.36	\$ 14.36	\$ 14.44
Total return <sup>1</sup>	(5.88%)	14.00%	6.96%	(0.55%)	5.63%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 291,618	\$342,656	\$ 332,347	\$342,152	\$364,044
Ratio of total expenses to average net assets 2	0.29%	0.29%	0.29%	0.32%	0.31%
Ratio of net investment income (loss) to average net assets	(0.29%)	(0.29%)	(0.29%)	(0.32%)	(0.31%)
Portfolio turnover rate	14%	12%	12%	17%	17%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

### MODERATELY CONSERVATIVE ALLOCATION FUND

	Year Ended December 31,				
	2018 2017		2016	2015	2014
Net asset value, beginning of period	\$ 15.86	\$ 14.42	\$ 13.60	\$ 13.63	\$ 12.98
Income (loss) from investment operations:					
Net investment income (loss) <sup>3</sup>	(0.05)	(0.05)	(0.04)	(0.05)	(0.04)
Net realized and unrealized gain (loss) on investment transactions	(0.50)	1.49	0.86	0.02	0.69
Total from investment operations	(0.55)	1.44	0.82	(0.03)	0.65
Net asset value, end of period	\$ 15.31	\$ 15.86	\$ 14.42	\$ 13.60	\$ 13.63
Total return <sup>1</sup>	(3.47%)	9.99%	6.03%	(0.22%)	5.01%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 88,927	\$ 98,414	\$ 97,741	<u>\$102,101</u>	\$107,669
Ratio of total expenses to average net assets 2	0.31%	0.30%	0.30%	0.33%	0.32%
Ratio of net investment income (loss) to average net assets	(0.30%)	(0.30%)	(0.30%)	(0.33%)	(0.32%)
Portfolio turnover rate	17%	15%	15%	23%	20%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The Fund also will indirectly bear its prorated share of expenses of the underlying funds. Such expenses are not included in the calculation of this ratio.

<sup>&</sup>lt;sup>3</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

<sup>&</sup>lt;sup>2</sup> The Fund also will indirectly bear its prorated share of expenses of the underlying funds. Such expenses are not included in the calculation of this ratio.

<sup>&</sup>lt;sup>3</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

## CONSERVATIVE ALLOCATION FUND

	Year Ended December 31,				
	2018	2017	2016	2015	2014
Net asset value, beginning of period	\$ 14.18	\$ 13.33	\$ 12.73	\$ 12.72	\$ 12.26
Income (loss) from investment operations:					
Net investment income (loss) <sup>3</sup>	(0.04)	(0.04)	(0.04)	(0.04)	(0.04)
Net realized and unrealized gain (loss) on investment transactions	(0.15)	0.89	0.64	0.05	0.50
Total from investment operations	(0.19)	0.85	0.60	0.01	0.46
Net asset value, end of period	\$ 13.99	\$ 14.18	\$ 13.33	\$ 12.73	\$ 12.72
Total return 1	(1.34%)	6.38%	4.71%	0.08%	3.75%
Ratios/Supplemental data:					
Net assets, end of period (in thousands)	\$ 57,092	\$58,659	\$ 56,092	\$61,217	\$65,183
Ratio of total expenses to average net assets <sup>2</sup>	0.33%	0.32%	0.31%	0.34%	0.33%
Ratio of net investment income (loss) to average net assets	(0.31%)	(0.31%)	(0.31%)	(0.34%)	(0.33%)
Portfolio turnover rate	23%	23%	26%	24%	26%

Total investment return is based on the change in net asset value of a share during the period and assumes reinvestment of dividends and distributions at net asset value. Total returns do not reflect expenses associated with variable contracts such as administrative fees, account charges and surrender charges, which if reflected would reduce the total returns for all periods presented. Total returns may reflect adjustments to conform with generally accepted accounting principles.

<sup>&</sup>lt;sup>2</sup> The Fund also will indirectly bear its prorated share of expenses of the underlying funds. Such expenses are not included in the calculation of this ratio.

<sup>&</sup>lt;sup>3</sup> The net investment income (loss) per share was calculated using the average shares outstanding method.

#### 1 — ORGANIZATION

Penn Series Funds, Inc. ("Penn Series") was incorporated in Maryland on April 22, 1982. Penn Series is registered under the Investment Company Act of 1940, as amended, as an open-end, diversified management investment company. Penn Series is open only to purchasers of The Penn Mutual Life Insurance Company ("Penn Mutual") and The Penn Insurance and Annuity Company insurance contracts and certain of Penn Mutual's employee benefit plans.

Penn Series is presently offering shares in its Money Market, Limited Maturity Bond, Quality Bond, High Yield Bond, Flexibly Managed, Balanced, Large Growth Stock, Large Cap Growth, Large Core Growth, Large Cap Value, Large Core Value, Index 500, Mid Cap Growth, Mid Cap Value, Mid Core Value, SMID Cap Growth, SMID Cap Value, Small Cap Growth, Small Cap Value, Small Cap Index, Developed International Index, International Equity, Emerging Markets Equity, Real Estate Securities, Aggressive Allocation, Moderately Aggressive Allocation, Moderately Conservative Allocation and Conservative Allocation Funds (each a "Fund" and collectively, the "Funds"). Penn Series also has the authority to issue shares in three additional funds, each of which would have their own investment objective and policies.

Fund of Funds ("FOFs") – Each Penn Series FOF seeks to achieve its investment objective by investing in other Penn Series Funds ("Underlying Funds") and uses asset allocation strategies to determine how much to invest in the Underlying Funds. Each of the following is a Penn Series FOFs: Balanced, Aggressive Allocation, Moderately Aggressive Allocation, Moderately Conservative Allocation and Conservative Allocation Funds.

#### 2 — SIGNIFICANT ACCOUNTING POLICIES

The following significant accounting policies are followed by Penn Series in the preparation of its financial statements. The preparation of financial statements in accordance with the accounting principles generally accepted in the United States ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts and disclosures in the financial statements. Actual results could differ from those estimates and those differences could be material. The Funds are investment companies and follow the accounting and reporting guidance in Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic No. 946.

### **SECURITY VALUATION:**

**Money Market Fund** — Investments in securities are valued using the amortized cost method as permitted by Rule 2a-7 under the Investment Company Act of 1940, which involves initially valuing investments at cost and thereafter assuming a constant amortization to maturity of any premium or discount. This method approximates market value.

Limited Maturity Bond, Quality Bond, High Yield Bond, Flexibly Managed, Large Growth Stock, Large Cap Growth, Large Core Growth, Large Cap Value, Large Core Value, Index 500, Mid Cap Growth, Mid Cap Value, Mid Core Value, SMID Cap Growth, SMID Cap Value, Small Cap Growth, Small Cap Value, Small Cap Index, Developed International Index, International Equity, Emerging Markets Equity, Real Estate Securities Funds — Portfolio securities listed on a securities exchange or an automated quotation system for which quotations are readily available, including securities traded over the counter, are valued at the last quoted sale price on the principal exchange or market on which they are traded on the valuation date or, if there is no such reported sale on the valuation date, at the most recent quoted bid price. Securities valued according to these evaluation methods are categorized as Level 1 in the fair value hierarchy described below. Debt and fixed income securities are valued by recognized independent third-party valuation services, employing valuation methodologies that utilize actual market transactions, broker-dealer supplied valuations, and matrix pricing. Matrix pricing for corporate bonds, floating rate notes, municipal securities and U.S. government and government agency obligations considers yield or price of bonds of comparable quality, coupon, maturity and type and, for asset backed securities, commercial mortgage securities and U.S. government agency mortgage securities, also considers prepayment speed assumptions and attributes and performance of the underlying collateral. Securities valued according to these valuation methods are generally categorized as Level 2 in the fair value hierarchy described below. To the extent that bid prices are provided by the pricing service, the Funds will use the bid price. Debt obligations with remaining maturities of sixty days or less may be valued at their amortized cost, which approximates market value. The prices for foreign securities are reported in local currency and converted to U.S. dollars using currency exchange rates as of the valuation date.

Options are valued at the last traded price on the market where such options are principally traded or, if there was no trade on such day, at the last bid quote. Futures contracts are valued at the last settlement price on the market where such futures contracts are principally traded. Although derivatives may be subject to netting provisions, as discussed further in Note 7, derivatives held are valued at their gross amounts.

To assess the continuing appropriateness of third party pricing service security valuations, Penn Mutual Asset Management, LLC ("PMAM" or the "Adviser"), the investment adviser to each of the Funds, or the Fund's sub-adviser, as applicable, or the fund accounting service provider, who is subject to oversight by the Administrator, regularly monitor the prices and compare prices to alternate sources where applicable. Pricing challenges are issued for valuation differences exceeding certain tolerances or when considered not reflective of the market by the Adviser or sub-adviser, as applicable.

Securities for which market quotations are not readily available are valued at fair value prices determined using methods approved by the Penn Series Board of Directors (the "Board of Directors"). The Penn Series Valuation Committee (the "Valuation Committee"), established by and subject to oversight by the Board of Directors, monitors pricing related policies and procedures and approves all fair value determinations. The Valuation Committee consists of representatives from PMAM and Penn Mutual, the administrator to the Funds (the "Administrator"). The Valuation Committee regularly makes good faith judgments, using sources and information obtained, including recommendations and supporting rationales and inputs from the Adviser or the applicable sub-adviser, to establish and /or adjust fair valuations of securities as events occur and circumstances warrant. The information and inputs may include but are not limited to cost of the security, last sale price, private transaction trading prices, comparable publicly traded security prices, discount rates, publicly disclosed news stories and regulatory filings, estimated cash flows and yield curves. As part of its procedures, the Valuation Committee monitors the fair valued securities, considers additional news or significant developments relative to the specific security, reviews the valuations with the Adviser or respective sub-adviser on a regular basis and applies back testing procedures to valuations as applicable. Reasons for which securities may be valued in this manner include, but are not limited to, trading on an exchange for a security has been halted, suspended or has not begun, a security has been de-listed from a national exchange, trading on a security's primary market is temporarily closed at a time when, under normal conditions, it would be open, or valuation by a third party pricing service is currently not available or is no longer available.

Certain events may occur between the time that foreign markets close, on which securities held by the Fund principally trade, and the time at which the Fund's NAV is calculated. These securities are valued at a fair value utilizing an independent third party valuation service in accordance with procedures adopted by the Fund's Board of Directors. The methodology and procedures followed by the valuation service consider the correlation of the trading patterns of the foreign security to the intraday trading in the U.S. markets for investments such as ADRs, financial futures, ETFs, and certain indexes as well as prices for similar securities. Securities valued using such valuation service are classified as Level 2 of the fair value hierarchy as these adjustment factors are considered other observable inputs to the valuation. Values from the valuation service are applied in the event that there is a movement in the U.S. market that exceeds a specific threshold that has been established by the Valuation Committee. The Valuation Committee has also established a "confidence interval", which is used to determine the level of historical correlation between the value of a specific foreign security and movements in the U.S. market before a particular security will be fair valued when the threshold is exceeded. In the event that the threshold established by the Valuation Committee is exceeded on a specific day, the Funds shall value the non-U.S. securities in their portfolios that exceed the applicable "confidence interval" based upon the adjusted prices provided by the fair valuation service.

The determination of a security's fair value price often involves the consideration of a number of subjective factors, and is therefore subject to the unavoidable risk that the value assigned to a security may be higher or lower than the security's value would be if a reliable market quotation for the security was readily available.

Balanced, Aggressive Allocation, Moderately Aggressive Allocation, Moderate Allocation, Moderately Conservative Allocation and Conservative Allocation Funds — The valuation of each Fund's investment in its Underlying Funds is based on the net asset values of the Underlying Funds each business day.

Fair value measurements are determined within a framework that has established a fair value hierarchy based upon the various data inputs utilized in determining the value of the Funds' investments. Inputs refer broadly to the assumptions that

market participants would use in pricing an asset. Inputs may be observable or unobservable. Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances. These inputs are summarized into three broad levels as follows:

- Level 1 quoted prices in active markets for identical securities
- Level 2 other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.)
- Level 3 significant unobservable inputs (including the Fund's own assumptions in determining the fair value of investments)

Transfers between levels 1 and 2 during the year ended December 31, 2018, if any, are shown as notes on the Schedule of Investments of the individual Fund.

Significant Level 3 items at December 31, 2018 consist of \$4,926,097 of equities in the Large Growth Stock Fund which were not publicly trading. The unobservable inputs used in valuing these securities include new rounds of financing, negotiated transactions of significant size between other investors in the company, relevant market valuations of peer companies and strategic events affecting the company. Significant increases (decreases) in the valuation indicated by the new rounds of financing, valuations observed through negotiated transactions between other investors in the company or changes in the market valuation of relevant peer companies would result in directionally similar changes to the fair value. Fair value determinations are reviewed and updated on a regular basis and as information becomes available, including actual purchase and sale transactions of the issue.

**Foreign Currency Translation** — The books and records of the Funds are maintained in U.S. dollars. Foreign currency amounts are translated into U.S. dollars on the following basis: market value of investment securities, assets and liabilities at the current rate of exchange; purchases and sales of investment securities, income and expenses at the relevant rates of exchange prevailing on the respective dates of such transactions.

The Funds do not isolate the portion of realized and unrealized gains and losses on investments which is due to changes in the foreign exchange rate from that which is due to changes in market prices of all securities. Such fluctuations are included with net realized and unrealized gain or loss from investments.

Foreign security and currency transactions may involve certain considerations and risks not typically associated with those of U.S. dollar denominated transactions as a result of, among other factors, the level of governmental supervision and regulation of foreign securities markets and the possibility of political or economic instability.

Loan Agreements — Certain Funds may invest in loan agreements, also known as bank loans, which represent an interest in amounts owed by a borrower to a syndication of lenders. Bank loans may involve multiple loans with the same borrower under a single credit agreement (each loan, a tranche), and each tranche may have different terms and associated risks. A bank or other financial institution typically acts as the agent and administers a bank loan in accordance with the associated credit agreement. Bank loans are generally noninvestment grade and often involve borrowers whose financial condition is troubled or uncertain and companies that are highly leveraged. The Funds may buy and sell bank loans in the form of either loan assignments or loan participations. A loan assignment transfers all legal, beneficial, and economic rights to the buyer. Although loan assignments continue to be administered by the agent, the buyer acquires direct rights against the borrower. In many cases, a loan assignment requires the consent of both the borrower and the agent. In contrast, a loan participation generally entitles the buyer to receive the cash flows from principal, interest, and any fee payments that the seller is entitled to receive from the borrower; however, the seller continues to hold legal title to the loan. As a result, with loan participations, the buyer generally has no right to enforce compliance with terms of the credit agreement against the borrower, and the buyer is subject to the credit risk of both the borrower and the seller. Bank loans often have extended settlement periods, during which the Fund is subject to nonperformance by the counterparty.

**SECURITY TRANSACTIONS, INVESTMENT INCOME AND EXPENSES** — Security transactions are accounted for on the trade date. Dividend income is recorded on the ex-dividend date and interest income is accrued as earned. Discounts and premiums are accreted and amortized using the effective interest method. The cost of investment securities sold is determined by using the specific identification method for both financial reporting and income tax purposes. Expenses directly attributable to a Fund are directly charged. Common expenses of the Funds are allocated using methods approved by the Board of Directors, generally based on average net assets. Expenses included in the accompanying financial statements reflect the expenses of each Fund and do not include any expenses associated with the Underlying Funds of the FOFs.

**DIVIDENDS TO SHAREHOLDERS** — Except for the Money Market Fund, all or a portion of each Fund's undistributed net investment income and accumulated net realized gain on investment and foreign exchange transactions, if any, at December 31, 2018 were deemed distributed as consent dividends to each respective Fund's shareholders in place of regular distributions. As consent dividends, shareholders of each Fund agree to treat their share of undistributed net investment income and accumulated net realized gain on investment and foreign exchange transactions, if any, at December 31, 2018, respectively, as dividend income and net capital gains for tax purposes. In the case of the Money Market Fund, dividends paid from undistributed net investment income and accumulated net realized gain on investments are declared daily and paid monthly.

Dividends from net investment income and distributions from net realized gains are determined in accordance with federal income tax regulations which may differ from net investment income and net realized capital gains recorded in accordance with accounting principles generally accepted in the United States. To the extent that these differences are permanent, such amounts are reclassified within the capital accounts based on their federal tax basis treatment; temporary differences do not require such reclassification. Distributions from net realized gains may involve short-term capital gains, which are included as ordinary income for tax purposes.

The character of distributions received from Real Estate Investment Trusts ("REITs") held by a Fund is generally comprised of net investment income, capital gains, and return of capital. It is the policy of the Funds to estimate the character of distributions received from the underlying REITs based on historical data provided by the REITs.

## 3 — Investment Advisory and Other Corporate Services

## **Investment Advisory Services**

PMAM serves as investment adviser to each series of Penn Series. With the exception of the Money Market, Limited Maturity, Quality Bond, High Yield Bond, Balanced, Aggressive Allocation, Moderately Aggressive Allocation, Moderately Conservative Allocation and Conservative Allocation Funds, PMAM has entered into sub-advisory agreements to provide investment management services to each of the Funds.

Each of the Funds pay PMAM, on a monthly basis, an advisory fee accrued daily based on the average daily net assets of the Fund, at the following rates pursuant to the investment advisory agreements:

Investment Advisory Fees

Fund	Sub-Adviser	(As a Percentage of the Average Daily Net Assets of the Fund)
Money Market Fund	None	0.33% of the first \$200,000,000;
		0.31% of the next \$150,000,000;
		0.29% of the next \$150,000,000;
		0.27% over \$500,000,000.
Limited Maturity Bond Fund	None	0.46% of the first \$200,000,000;
		0.44% of the next \$150,000,000;
		0.42% of the next \$150,000,000;
		0.40% over \$500,000,000.

		Investment Advisory Fees (As a Percentage of the Average Daily
Fund	Sub-Adviser	Net Assets of the Fund)
Quality Bond Fund	None	0.46% of the first \$200,000,000; 0.44% of the next \$150,000,000; 0.42% of the next \$150,000,000; 0.40% over \$500,000,000.
High Yield Bond Fund*	None	0.46% of the first \$200,000,000; 0.44% of the next \$150,000,000; 0.42% of the next \$150,000,000; 0.40% over \$500,000,000.
Flexibly Managed Fund	T. Rowe Price Associates, Inc.	0.72% of the first \$500,000,000; 0.70% of the next \$2,000,000,000; 0.68% of the next \$1,500,000,000; 0.65% of the next \$1,000,000,000; 0.62% over \$5,000,000,000.
Balanced Fund	None	None
Large Growth Stock Fund	T. Rowe Price Associates, Inc.	0.72% of the first \$250,000,000; 0.68% of the next \$250,000,000; 0.65% over \$500,000,000.
Large Cap Growth Fund	Massachusetts Financial Services Company	0.55%
Large Core Growth Fund	Morgan Stanley Investment Management Inc.	0.60%
Large Cap Value Fund**	AllianceBernstein, LP	0.67% of the first \$150,000,000; 0.65% over \$150,000,000.
Large Core Value Fund	Eaton Vance Management	0.67% of the first \$150,000,000; 0.65% of the next \$250,000,000; 0.60% over \$400,000,000.
Index 500 Fund	SSgA Fund Management, Inc.	0.14% of the first \$150,000,000; 0.13% of the next \$150,000,000; 0.12% over \$300,000,000.
Mid Cap Growth Fund	Ivy Investment Management Company	0.70%
Mid Cara Value Fund	Neuberger Berman Management, Inc.	0.55% of the first \$250,000,000; 0.525% of the next \$250,000,000; 0.50% of the next \$250,000,000; 0.475% of the next \$250,000,000; 0.45% of the next \$500,000,000; 0.425% over \$1,500,000,000.
Mid Core Value Fund	American Century Investment Management, Inc.	0.72%
SMID Cap Growth Fund	Goldman Sachs Asset Management, LP	0.75%
SMID Cap Value Fund	AllianceBernstein, LP	0.84%
Small Cap Growth Fund	Janus Capital Management LLC	0.80% of the first \$25,000,000; 0.75% of the next \$25,000,000; 0.70% over \$50,000,000.
Small Cap Value Fund	Goldman Sachs Asset Management, LP	0.75% of the first \$50,000,000; 0.725% of the next \$50,000,000; 0.70% over \$100,000,000.
Small Cap Index Fund Developed International Index Fund	SSgA Fund Management, Inc. SSgA Fund Management, Inc.	0.30% 0.30%

Fund	Sub-Adviser	Investment Advisory Fees (As a Percentage of the Average Daily Net Assets of the Fund)
International Equity Fund***	Vontobel Asset Management, Inc.	0.83% of the first \$227,000,000;
Emerging Markets Equity Fund	Morgan Stanley Investment Management Inc.	0.75% over \$227,000,000. 0.92%
Real Estate Securities Fund	Cohen & Steers Capital Management, Inc.	0.70%
Aggressive Allocation Fund	None	0.12% of the first \$200,000,000; 0.11% of the next \$150,000,000; 0.10% of the next \$150,000,000; 0.09% over \$500,000,000.
Moderately Aggressive Allocation Fund	None	0.12% of the first \$200,000,000; 0.11% of the next \$150,000,000; 0.10% of the next \$150,000,000; 0.09% over \$500,000,000.
Moderate Allocation Fund	None	0.12% of the first \$200,000,000; 0.11% of the next \$150,000,000; 0.10% of the next \$150,000,000; 0.09% over \$500,000,000.
Moderately Conservative Allocation Fund	None	0.12% of the first \$200,000,000; 0.11% of the next \$150,000,000; 0.10% of the next \$150,000,000; 0.09% over \$500,000,000.
Conservative Allocation Fund	None	0.12% of the first \$200,000,000; 0.11% of the next \$150,000,000; 0.10% of the next \$150,000,000; 0.09% over \$500,000,000.

Investment Advisory Con-

- \* Effective May 1, 2018, T. Rowe Price Associates, Inc. was terminated as the investment Sub-Adviser to the High Yield Bond Fund and PMAM assumed the day-to-day management of the Fund. Prior to May 1, 2018, the Fund's Investment Advisory Fee was 0.56% for the first \$250 million and 0.53% thereafter on the average daily net assets of the Fund.
- \*\* Effective October 1, 2018, Loomis, Sayles & Company, LP was terminated as the investment Sub-Adviser to the Large Cap Value Fund and AllianceBernstein, LP assumed the day-to-day management of the Fund.
- \*\*\* Effective October 1, 2018. Prior to October 1, 2018, the Fund's investment Advisory Fee was 0.86% for the first \$227 million; 0.84% of the next \$227 million and 0.82% thereafter on the average daily net assets of the Fund.

For providing investment management services to the Funds, PMAM pays each sub-adviser, on a monthly basis, a sub-advisory fee.

### Administrative and Corporate, Co-Administrative and Shareholder Services

Each of the Funds pays Penn Mutual, on a quarterly basis, 0.01% of the Fund's average daily net assets under a revised administrative and corporate services agreement and 0.09% under a shareholder servicing agreement. Each of the Funds pays PMAM, on a quarterly basis, 0.02% of the Fund's average daily assets under a co-administrative agreement. These fees are accrued daily.

## **Fund Administration and Accounting Services**

Under a fund administration and accounting agreement, BNY Mellon Investment Servicing (US), Inc. ("BNY Mellon") serves as accounting agent for Penn Series. Each of the Funds, except the FOFs, International Equity Fund, Emerging Markets Equity Fund and Developed International Index Fund, pays BNY Mellon, on a monthly basis, an annual fee accrued daily based on the average daily net assets of the Fund equal to 0.070% for the first \$100 million, 0.050% for the next \$200

million, 0.030% for the next \$300 million and 0.020% thereafter. With the exception of the FOFs, International Equity Fund, Emerging Markets Equity Fund, Developed International Index Fund and Money Market Fund, the minimum annual fee each Fund must pay is \$27,500. The annual accounting fee for each of the FoFs is an asset based fee of 0.010% of FOF's average daily net assets, exclusive of out-of-pocket expenses. Each FOF's minimum annual fee is \$12,000. The minimum annual fee is \$48,000 for each of the International Equity Fund, Emerging Markets Equity Fund and Developed International Index Fund. The Money Market Fund pays no minimum annual fee. Each of the International Equity, Emerging Markets Equity and Developed International Index Funds pays BNY Mellon, on a monthly basis, an annual 0.080% for the first \$100 million, 0.060% for the next \$300 million, 0.040% for the next \$200 million, and 0.030% thereafter. In addition, each of the Funds pays BNY Mellon approximately 0.010% of the Fund's average daily net assets for tax and regulatory administration services.

### **Transfer Agent Services**

Under a transfer agency agreement, BNY Mellon serves as transfer agent for Penn Series.

#### **Custodial Services**

The Bank of New York Mellon, Inc., serves as custodian for Penn Series. In addition to transaction charges and out-of-pocket expenses, each of the Funds pay The Bank of New York Mellon, Inc., on a monthly basis, an annual custody fee of 0.007% for U.S. securities. The Bank of New York Mellon, Inc. serves as foreign custodian for Penn Series. There is a separate custody fee schedule for foreign securities.

## **Expenses and Limitations Thereon**

Each Fund bears all expenses of its operations other than those incurred by PMAM and, if applicable its sub-adviser under its respective investment advisory agreement and those incurred by Penn Mutual under its administrative and corporate services agreement. PMAM and Penn Mutual have agreed to waive fees or reimburse expenses to the extent the Fund's total expense ratio (excluding nonrecurring account fees, fees on portfolio transactions, such as exchange fees, dividends and interest on securities sold short, acquired fund fees and expenses, service fees, interest, taxes, brokerage commissions, other capitalized expenses and other non-routine expenses or extraordinary expenses not incurred in the ordinary course of a Fund's business, but including investment advisory and administrative and corporate services fees) exceeds the applicable expense limitation for the Fund. The expense limitations for the Funds are as follows:

<u>Fund</u>	<b>Expense Limitation</b>	<u>Fund</u> <u>E</u>	Expense Limitation
Money Market Fund	0.64%	SMID Cap Growth Fund	1.07%
Limited Maturity Bond Fund	0.74%	SMID Cap Value Fund	1.26%
Quality Bond Fund	0.73%	Small Cap Growth Fund	1.13%
High Yield Bond Fund	0.92%	Small Cap Value Fund	1.02%
Flexibly Managed Fund	0.94%	Small Cap Index Fund	0.74%
Balanced Fund	0.79%	Developed International Index Fund	0.94%
Large Growth Stock Fund	1.02%	International Equity Fund	1.20%
Large Cap Growth Fund	0.89%	Emerging Markets Equity Fund	1.78%
Large Core Growth Fund	0.90%	Real Estate Securities Fund	1.02%
Large Cap Value Fund	0.96%	Aggressive Allocation Fund*	0.40%
Large Core Value Fund	0.96%	Moderately Aggressive Allocation Fund	<b>1*</b> 0.34%
Index 500 Fund	0.42%	Moderate Allocation Fund*	0.34%
Mid Cap Growth Fund	1.00%	Moderately Conservative Allocation Fu	nd* 0.35%
Mid Cap Value Fund	0.83%	Conservative Allocation Fund*	0.38%
Mid Core Value Fund	1.11%		

<sup>\*</sup> For FOFs, with the exception of the Balanced Fund, the operating expense limit applies only at the Fund level and does not limit the fees indirectly incurred by the FOFs through their investments in the Underlying Funds.

Effective September 10, 2009, Penn Series, on behalf of its Money Market Fund, PMAM, and Penn Mutual, entered into an agreement whereby PMAM and Penn Mutual may temporarily and voluntarily waive fees and/or reimburse expenses in excess of their current fee waiver and expense reimbursement commitments in an effort to maintain a minimum net distribution yield for the Money Market Fund. Under the agreement, PMAM and Penn Mutual may, subject to certain minimum yield criteria, as well as a prospective three-year reimbursement period, recapture from the Money Market Fund any fees or expenses waived and/or reimbursed under this arrangement. These reimbursement payments by the Fund to PMAM and/or Penn Mutual are considered "extraordinary expenses" and are not subject to any net operating expense limitations in effect at the time of such payment. This recapture could negatively affect the Fund's future yield.

If, at the end of each month, there is no liability of PMAM and Penn Mutual to pay the Funds such excess amount, and if payments of the advisory fee or administrative and corporate services fee at the end of prior months during the preceding three fiscal years have been reduced in excess of that required to maintain expenses within the expense limitation, such excess reduction is eligible to be recaptured by PMAM and Penn Mutual and, if recaptured, would become payable by the Funds to PMAM and Penn Mutual along with the advisory fee or administrative and corporate services fee for that month, as applicable. Penn Mutual and/or PMAM's election not to recapture the amount of any reduction and reimbursement to which it is entitled in no way impairs the rights of Penn Mutual and/or PMAM to subsequently recapture such amount, provided that such amount remains eligible for recapture and would not cause the Fund to exceed its expense limit for that fee payment period.

During the year ended December 31, 2018, previously waived administration and corporate services fees were recaptured by PMAM. The recaptured fees are shown as Recaptured administrative fees on the Statements of Operations and are as follows:

Money Market Fund \$75,300

During the year ended December 31, 2018, previously waived advisory fees were recaptured by PMAM. The recaptured fees are shown as Recaptured advisory fees on the statement of operations and are as follows:

Money Market Fund \$543,462

Total fees of \$443,000 were paid to Directors of Penn Series, who are not interested persons of Penn Series, for the year ended December 31, 2018. Directors who are also employees of PMAM or its affiliates and officers of the Company receive no compensation from the Company for their services.

### 4 — RELATED PARTY TRANSACTIONS

Certain benefit plans of Penn Mutual own annuity contracts that are invested in the Penn Series Funds. The benefit plan assets that are invested in the Penn Series Funds at December 31, 2018 are as follows:

Money Market Fund	\$ 8,427,707
Limited Maturity Bond Fund	33,758,928
Quality Bond Fund	12,549,629
Large Growth Stock Fund	17,790,111
Large Core Value Fund	24,221,343
Index 500 Fund	17,357,951
SMID Cap Growth Fund	4,589,523
SMID Cap Value Fund	4,399,999
Small Cap Index Fund	3,709,206
Developed International Index Fund	2,769,313
International Equity Fund	7,124,402

Certain Funds affect trades for security purchase and sale transactions through brokers that are affiliates of the Adviser or the sub-advisers. Commissions paid on those trades from the Funds for the year ended December 31, 2018 were as follows:

Large Growth Stock Fund	\$	27
Large Core Growth Fund		37
SMID Cap Growth Fund	-	7,736
Small Cap Value Fund	36	5,021
Emerging Markets Equity Fund		69

The Funds may purchase securities from or sell to other funds that have a common adviser. These interfund transactions are primarily used for transactional cost purposes and are made pursuant to Rule 17a-7 of the Investment Company Act of 1940.

A Summary of the FOFs total long-term and short-term purchases and sales of the shares of the underlying Funds during the year ended December 31, 2018 as follows:

	19.1		6.1	Net	Net Change in Unrealized			5
Balanced Fund	Total Value at 12/31/17	Purchases	Sales Proceeds	Realized Gain (Loss)	Appreciation (Depreciation)	Total Value at 12/31/18	Number of Shares	Income
Affiliated Equity Funds —	59.0%				<u> </u>			
Penn Series Index 500 Fund*	\$50,441,167	\$3,443,324	\$ 7,848,380	\$5,814,846	\$(7,687,746)	\$44,163,211	2,120,173	\$ <del></del>
Affiliated Fixed Income Fu	nds — 41.1%							
Penn Series Quality Bond								
Fund*	33,650,367	3,030,339	5,860,185	1,525,552	(1,597,318)	30,748,755	2,097,459	
	\$84,091,534	\$6,473,663	\$13,708,565	<u>\$7,340,398</u>	<u>\$(9,285,064)</u>	<u>\$74,911,966</u>		<u>\$—</u>

Aggressive Allocation Fund	Total Value at 12/31/17	Purchases	Sales Proceeds	Net Realized Gain (Loss)	Net Change in Unrealized Appreciation (Depreciation)	Total Value at 12/31/18	Number of Shares	Dividend Income
Affiliated Equity Funds — 56.	.6%							
Penn Series Flexibly Managed								
Fund*	\$ 2,239,159	\$ 126,938	\$ 457,178	\$ 222,002	\$ (201,611)	\$ 1,929,310	36,707	<b>\$</b> —
Penn Series Index 500 Fund*	2,985,546	169,045	1,173,406	817,072	(902,908)	1,895,349	90,991	_
Penn Series Large Cap Growth								
Fund*	2,239,159	126,937	491,927	194,067	(156,058)	1,912,178	106,826	_
Penn Series Large Cap Value								
Fund*	4,478,319	1,555,510	528,162	280,247	(702,309)	5,083,605	193,883	_
Penn Series Large Core Value								
Fund*	7,463,864	606,876	2,081,870	953,684	(1,254,857)	5,687,697	326,691	_
Penn Series Large Growth								
Stock Fund*	746,386	48,955	166,498	58,328	(55,885)	631,286	15,802	_
Penn Series Mid Cap Growth								
Fund*	1,492,773	159,292	425,395	199,678	(159,341)	1,267,007	66,650	_
Penn Series Mid Cap Value	2 = 2 4 0 2 2	206 424	<b>5.15.000</b>	264.070	(=0.1.220)	2 002 000	126 120	
Fund*	3,731,932	396,434	515,000	261,070	(791,338)	3,083,098	136,420	_
Penn Series Mid Core Value	2 724 022	260 474	544 704	470.660	(630.404)	2 420 404	440.644	
Fund*	3,731,932	369,171	511,794	179,669	(638,484)	3,130,494	149,641	_
Penn Series Real Estate	2 220 450	206 440	647.077	202.420	(256 727)	1 02 1 2 12	00 474	
Securities Fund*	2,239,159	306,449	647,077	292,439	(356,727)	1,834,243	89,171	
Penn Series Small Cap Growth Fund*	2 220 450	202 542	F00 111	222 006	(275 404)	1 012 212	F4 (04	
	2,239,159	303,513	588,141	232,886	(275,104)	1,912,313	51,684	_
Penn Series Small Cap Index Fund*	7/6 297	101 744	152 255	110 144	(178,241)	626,679	30 033	
Penn Series Small Cap Value	746,387	101,744	153,355	110,144	(1/0,241)	020,079	30,932	_
Fund*	2,239,159	273,388	346,541	223,063	(507,586)	1,881,483	58,870	
Penn Series SMID Cap Growth	2,233,133	275,500	ו דכייסדכ	223,003	(507,500)	1,001,70)	70,070	_
Fund*	1,492,773	186,289	351,772	140,966	(189,361)	1,278,895	51,299	
Penn Series SMID Cap Value	1,772,777	100,209	JJ 1,772	140,500	(109,501)	1,270,099	J 1,233	
Fund*	3,731,932	2,214,135	815,544	507,323	(1,230,890)	4,406,956	186 183	_
Affiliated Fixed Income Fund		2,211,100	012,211	707,727	(1,230,030)	1, 100, 550	100, 100	
Penn Series High Yield Bond	3 — 9.1%							
Fund*	1,492,773	116,672	296,358	25,819	(56,087)	1,282,819	99,598	
Penn Series Limited Maturity	1,772,777	110,072	290,000	20,019	(50,007)	1,202,019	99,990	
Bond Fund*	2,985,546	2,518,859	969,896	23,327	41,283	4,599,119	375 132	_
Penn Series Quality Bond Fund*	2,240,685	129,537	2,338,027	29,120	(61,315)	.,,,,,,,,,,	<i>J</i> , <i>J</i> , <i>I</i> , <i>L</i>	_
Affiliated International Equit			2,550,027	25,120	(01,515)			
Penn Series Developed	y Fullus — 55	0.2/0						
International Index Fund*	7,463,864	892,281	844,277	326,338	(1,384,718)	6,453,488	528 109	
Penn Series Emerging Markets	7, 102,007	0,72,201	011,277	720,770	(1,501,710)	0, 177, 100	J20, 109	
Equity Fund*	8,210,251	1,981,631	1,480,193	203,504	(1,673,489)	7,241,704	635.795	_
Penn Series International Equity	0,210,201	1,501,051	1, 100, 177	200,001	(1,07), 10)	,,_ , ,,, 0 1	~~~,,,,,	
Fund*	10,449,410	847,475	2,404,146	1,058,523	(2,172,217)	7,779,045	293,438	_
	<u>\$74,640,168</u>	ا ۱ را رهررا د	\$17,586,557	20,227,209	<u>\$(12,907,243)</u>	707,010,700		<u>\$—</u>

<sup>\*</sup> Non-income producing security.

Moderately Aggressive Allocation Fund	Total Value at 12/31/17	Purchases	Sales Proceeds	Net Realized Gain (Loss)	Net Change in Unrealized Appreciation (Depreciation)	Total Value at 12/31/18	Number of Shares	Dividend Income
Affiliated Equity Funds	<b>—</b> 55 <b>.</b> 8%							
Penn Series Flexibly								
Managed Fund*	\$ 15,942,362	\$ 216,985	\$ 3,272,094	\$ 1,709,322	\$ (1,545,865)	\$ 13,050,710	248,301	\$ <del></del>
Penn Series Index 500								
Fund*	10,628,242	144,655	4,102,146	2,915,894	(3,176,700)	6,409,945	307,727	_
Penn Series Large Cap			. == . = = .		(105.0.0)			
Growth Fund*	7,971,181	125,121	1,784,384	838,911	(683,818)	6,467,011	361,286	_
Penn Series Large Cap	45.042.262	4.055.430	2 200 404	4 240 042	(2.744.066)	47 402 075	CEE 720	
Value Fund*	15,942,362	4,855,120	2,209,484	1,319,943	(2,714,966)	17,192,975	655,720	_
Penn Series Large Core Value Fund*	26 570 604	1 244 000	7 574 990	2 (40 420	(4 502 940)	40 225 422	1 101 910	
	26,570,604	1,211,088	7,571,880	3,619,429	(4,593,819)	19,235,422	1,104,849	_
Penn Series Large Growth Stock Fund*	2 657 060	02 842	625 690	220,692	(100.076)	2 424 020	E2 440	
	2,657,060	92,843	635,680	220,682	(199,976)	2,134,929	53 <b>,</b> 440	_
Penn Series Mid Cap Growth Fund*	5,314,121	381,304	1,569,629	836,166	(677,107)	4,284,855	225,400	
Penn Series Mid Cap	<i>J</i> , <i>J</i> 14, 12 1	JO 1, JU <del>4</del>	1,309,029	630, 100	(0//, 10/)	4,204,033	22 <i>)</i> , <del>1</del> 00	
Value Fund*	10,628,242	786,845	1,659,168	841,581	(2,256,699)	8,340,801	369,062	_
Penn Series Mid Core	10,020,2 12	700,019	1,055,100	011,501	(2,230,033)	0,5 10,00 1	J0J,002	
Value Fund*	10,628,242	655,499	1,584,815	989,031	(2,218,419)	8,469,538	404,854	
Penn Series Real Estate	10,020,2 12	0,,1,,	1,50 1,0 15	505,051	(2,210,117)	0, 100,000	10 1,001	
Securities Fund*	7,971,181	724,914	2,261,555	1,386,688	(1,618,707)	6,202,521	301,532	_
Penn Series Small Cap	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7 = 1,5 * 1	_, ,,,,,,	1,5 = 0,0 = 0	(1,011)	-,,	2 - 1,22 -	
Growth Fund*	5,314,121	526,887	1,454,096	839,480	(914,757)	4,311,635	116,531	_
Penn Series Small Cap	-,,	2 -,	,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(= 1,121)	1,2 , 122	-,	
Index Fund*	5,314,121	530,532	1,157,457	815,543	(1,264,106)	4,238,633	209,212	_
Penn Series Small Cap	, ,	•	, ,	,	(, , ,	, ,	,	
Value Fund*	7,971,181	670,189	1,324,162	900,909	(1,855,192)	6,362,925	199,090	_
Penn Series SMID Cap					,			
Growth Fund*	2,657,060	236,263	657,966	156,959	(229,702)	2,162,614	86,747	
Penn Series SMID Cap								
Value Fund*	10,628,242	6,782,942	2,558,960	1,616,814	(3,694,203)	12,774,835	539,706	_
<b>Affiliated Fixed Income</b>	Funds — 18.3	3%						
Penn Series High Yield								
Bond Fund*	5,314,121	175,357	1,048,692	193,986	(295,820)	4,338,952	336,875	_
Penn Series Limited								
Maturity Bond Fund*	21,256,483	8,530,821	5,695,626	401,982	(46,708)	24,446,952	1,994,042	_
Penn Series Quality Bond								
Fund*	21,270,973	951,449	10,909,616	1,223,308	(1,376,120)	11,159,994	761,255	_
Affiliated International	<b>Equity Funds</b>	<b>—</b> 25 <b>.</b> 3%						
Penn Series Developed								
International Index					<b></b>			
Fund*	18,599,423	1,617,527	2,448,864	938,050	(3,426,624)	15,279,512	1,250,369	_
Penn Series Emerging	24 254 402	4 205 762	4.046.073	(3( 0(:	(4 227 277)	47.044.063	4.564.000	
Markets Equity Fund*	21,256,483	4,205,763	4,046,073	636,064	(4,237,275)	17,814,962	1,564,088	_
Penn Series International	24 004 725	4 740 404	0 555 603	2 070 070	(7,002,346)	24.026.265	027.000	
Equity Fund*	31,884,725	<u>1,718,481</u>	8,555,603	3,970,978	(7,092,216)		827,098	_
	\$265,720,530	<u>\$35,140,585</u>	\$66,507,950	\$26,371,720	<u>\$(44,118,799</u> )	\$216,606,086		<u></u>

<sup>\*</sup> Non-income producing security.

Moderate Allocation Fund	Total Value at	Purchases	Sales Proceeds	Net Realized Gain (Loss)	Net Change in Unrealized Appreciation (Depreciation)	Total Value at 12/31/18	Number of Shares	Dividend Income
<b>Affiliated Equity Funds</b>	<b>— 44.1</b> %							
Penn Series Flexibly								
Managed Fund*	\$ 20,546,801	\$ 352,912	\$ 3,610,459	\$ 1,937,939	\$ (1,745,845)	\$ 17,481,348	332,598	\$ <del></del>
Penn Series Index 500								
Fund*	10,273,401	174,836	4,478,464	2,941,314	(3,186,644)	5,724,443	274,817	
Penn Series Large Cap								
Growth Fund*	6,848,934	260,808	1,455,846	683,550	(562,115)	5,775,331	322,644	_
Penn Series Large Cap					(			
Value Fund*	10,273,400	6,622,259	1,332,660	718,446	(1,887,225)	14,394,220	548,979	
Penn Series Large Core	22.074.260	4 422 075	7 424 260	2.250.062	(2.426.542)	47 470 224	006 600	
Value Fund*	23,971,268	1,423,875	7,431,360	2,350,963	(3,136,512)	17,178,234	986,688	_
Penn Series Large	2 424 467	402.006	775 402	EE2 400	(524.002)	2.050.077	74 500	
Growth Stock Fund*	3,424,467	192,986	775,492	552,109	(534,093)	2,859,977	71,589	_
Penn Series Mid Cap	6 949 034	640 204	4.046.530	4 4 4 0 4 2 2	(054 727)	F 740 044	204.047	
Growth Fund*	6,848,934	649,204	1,946,520	1,140,133	(951,737)	5,740,014	301,947	
Penn Series Mid Cap Value Fund*	10,273,400	1,006,661	1,494,541	758,579	(2,163,684)	8,380,415	370,815	
Penn Series Mid Core	10,273,400	1,006,661	1,494,541	/50,5/9	(2,103,004)	0,300,413	3/0,013	_
Value Fund*	17,122,334	1,360,971	2,271,345	1,183,705	(3,213,469)	14,182,196	677,925	
Penn Series Real Estate	17,122,334	1,300,971	2,27 1,343	1, 105,705	(3,213,409)	14, 102, 190	0//,923	_
Securities Fund*	6,848,934	611,955	1,711,109	1,131,426	(1,341,488)	5,539,718	269,311	
Penn Series Small Cap	0,040,774	011,555	1,7 1 1, 10 9	1, 10 1,720	(1,541,400)	2,229,710	209,511	
Growth Fund*	3,424,467	419,515	897,827	548,269	(606,560)	2,887,864	78,050	
Penn Series Small Cap	2, 12 1, 107	110,010	077,027	J 10,20J	(000,500)	2,007,001	70,000	
Index Fund*	6,848,934	843,813	1,413,292	927,727	(1,529,007)	5,678,175	280,265	_
Penn Series Small Cap	0,0 10,55 1	0 15,0 15	.,	5-1,1-1	(1,525,007)	3,0,0,1,	200,200	
Value Fund*	10,273,400	1,049,721	1,537,208	1,014,548	(2,276,660)	8,523,801	266,702	_
Penn Series SMID Cap	10,210,100	.,,	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,,	(-,-, -,,	-,,,-,,	,	
Growth Fund*	3,424,467	384,164	808,939	192,810	(295,534)	2,896,968	116,204	_
Penn Series SMID Cap	-, -, -, -	,	,	,	( / /	, - ,-	,	
Value Fund*	6,848,934	8,316,286	1,946,438	1,229,023	(3,039,110)	11,408,695	481,990	_
Affiliated Fixed Income					, , ,	, ,	•	
Penn Series High Yield								
Bond Fund*	10,273,401	330,852	1,682,502	705,600	(909,667)	8,717,684	676,839	_
Penn Series Limited	, ,	,	, ,	,	, , ,	, ,	,	
Maturity Bond Fund*	41,093,602	11,527,129	8,613,686	711,171	(67,934)	44,650,282	3,641,948	
Penn Series Quality Bond					, ,			
Fund*	78,816,427	3,513,854	22,221,056	3,583,604	(3,904,348)	59,788,481	4,078,341	_
<b>Affiliated International</b>	<b>Equity Funds</b>	<b>—</b> 17.2%						
Penn Series Developed								
International Index								
Fund*	17,122,334	1,791,726	1,965,862	768,830	(3,098,186)	14,618,842	1,196,305	
Penn Series Emerging								
Markets Equity Fund*	17,122,334	3,461,533	2,737,445	566,070	(3,499,151)	14,913,341	1,309,336	
Penn Series International								
Equity Fund*	30,820,202	2,080,571	9,478,966	4,486,893	(7,350,250)	20,558,450	775 <b>,</b> 498	_
	\$342,500,375	\$46,375,631	\$79,811,017	\$28,132,709	\$(45,299,219)	\$291,898,479		<u>=</u> \$—
								=

<sup>\*</sup> Non-income producing security.

Moderately Conservative Allocation Fund	Total Value at 12/31/17	Purchases	Sales Proceeds	Net Realized Gain (Loss)	Net Change in Unrealized Appreciation (Depreciation)	Total Value at 12/31/18	Number of Shares	Dividend Income
Affiliated Equity Funds –	<b>- 32.0</b> %							
Penn Series Flexibly								
Managed Fund*	\$ 7,805,532	\$ 600,590	\$ 1,446,251	\$ 808,119	\$ (745,714)	\$ 7,022,276	133,605	\$——
Penn Series Index 500					<b>4</b>			
Fund*	1,951,383	129,859	1,177,213	849,212	(891,083)	862,158	41,390	
Series Large Cap Growth	4054303	222.054	464.554	247 672	(40= 506)	4 = 20 = = 2	07.400	
Fund*	1,951,383	222,854	464,551	217,652	(187,586)	1,739,752	97,193	
Penn Series Large Cap	2 02 = 0 = 4	2 2 40 ===	100 160	2 4 7 0 0 7	(600 470)		465.355	
Value Fund*	2,927,074	2,249,773	488,463	247,905	(600,159)	4,336,130	165,375	
Penn Series Large Core	6 020 040	0.40.330	2 264 246	670 444	(0.43, 400)	E 474 EDE	207.246	
Value Fund*	6,829,840	849,228	2,261,246	670,111	(913,408)	5,174,525	297,216	_
Penn Series Mid Cap Value	4.054.202	2.42.077	220 472	464.405	(447.200)	4 602 402	74 447	
Fund*	1,951,383	342,077	328,172	164,405	(447,200)	1,682,493	74 <b>,</b> 447	_
Penn Series Mid Core Value		207.240	204 225	06.403	(220.445)	1 =00 (01	04.670	
Fund*	1,951,383	297,349	296,325	86,402	(330,115)	1,708,694	81,678	_
Penn Series Real Estate	4.054.202	257.600	477.000	254.040	(244.764)	4 660 240	04.400	
Securities Fund*	1,951,383	257,688	477,098	251,010	(314,764)	1,668,219	81,100	_
Penn Series Small Cap	077 (04	100 355	224 445	170.006	(262.240)	055.050	42.204	
Index Fund*	975,691	198,255	226,465	170,896	(263,318)	855,059	42,204	_
Penn Series Small Cap	4054303	2 40 000	225.005	102 105	(255 (20)			
Value Fund*	1,951,383	349,009	335,907	102,185	(355,139)	1,711,531	53,552	
Penn Series SMID Cap	075 604	4 224 062	247.064	240.077	(402.255)	4 740 245	72.500	
Value Fund*	975,691	1,331,963	317,061	210,977	(483,355)	1,718,215	72,590	_
Affiliated Fixed Income F	unds — 57.5%	<b>/</b>						
Penn Series High Yield					( <u>-</u>			
Bond Fund*	2,927,074	218,494	457,206	165,294	(227,098)	2,626,558	203,925	_
Penn Series Limited					<b>/</b> · · · ·			
Maturity Bond Fund*	21,465,211	4,700,974	4,063,168	378,410	(55,441)	22,425,986	1,829,199	_
Penn Series Quality Bond					(		. ====	
Fund*	31,243,409	2,699,875	7,716,459	1,740,737	(1,841,032)	26,126,530	1,782,164	_
Affiliated International E	quity Funds –	<b>– 10.0</b> %						
Penn Series Developed								
International Index					<b>,</b>			
Fund*	2,927,074	526,683	395,131	151,651	(567,685)	2,642,592	216,251	
Penn Series Emerging								
Markets Equity Fund*	1,951,383	534,959	342,455	87,709	(434,058)	1,797,538	157,817	
Penn Series International								
Equity Fund*	5,854,149	813,029	1,633,748	794,865	(1,404,015)	4,424,280	166,891	_
	\$97,590,426	\$16,322,659	\$22,426,919	\$7,097,540	\$(10,061,170)	\$88,522,536		<u>\$—</u>

<sup>\*</sup> Non-income producing security.

Conservative Allocation Fund	Total Value at 12/31/17	Purchases	Sales Proceeds	Net Realized Gain (Loss)	Net Change in Unrealized Appreciation (Depreciation)	Total Value at 12/31/18	Number of Shares	Dividend Income
Affiliated Equity Funds —	- 19.6%							
Penn Series Flexibly								
Managed Fund*	\$ 4,632,308	\$ 779,513	\$ 1,004,233	\$ 565,190	\$ (532,330)	\$ 4,440,448	84,483	\$ <del></del>
Penn Series Index 500 Fund*	579,038	77,965	653,083	295,962	(299,882)			
Penn Series Large Cap	3/3,030	77,303	(0),00	293,902	(299,002)	_	_	_
Value Fund*	579,039	1,319,798	121,449	32,541	(164,542)	1,645,387	62,753	_
Penn Series Large Core	3, 3,033	.,5 .5,7 50	,	5-,51.	(101,51=)	.,0 15,507	0=,,,,,,	
Value Fund*	2,895,192	590,806	1,216,381	352,690	(440,495)	2,181,812	125,320	_
Penn Series Mid Cap Value								
Fund*	579,038	155,479	115,502	944	(87,730)	532,229	23,550	_
Penn Series Mid Core Value					<b>4&gt;</b>			
Fund*	1,158,077	283,489	211,318	63,112	(212,574)	1,080,786	51,663	_
Penn Series Real Estate	F70 030	444 749	446 453	2 ( ( 7	(22.070)	F27 722	25.655	
Securities Fund* Penn Series SMID Cap	579,038	114,348	146,453	3,667	(22,878)	527,722	25,655	_
Value Fund*	_	725,341	100,899	1,454	(82,514)	543,382	22,957	_
Affiliated Fixed Income F	unds — 76.2%		100,055	1,101	(02,511)	7 15,502	22,551	
Penn Series High Yield	41145 70.2%	o .						
Bond Fund*	1,737,116	243,881	281,282	107,656	(146,616)	1,660,755	128,941	_
Penn Series Limited	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	, ,	,	( 11/1 1/	, = = -, = = =	- /	
Maturity Bond Fund*	18,529,230	4,558,831	3,519,417	289,723	(12,155)	19,846,212	1,618,778	_
Penn Series Quality Bond								
Fund*	24,336,192	3,660,666	5,731,861	1,286,997	(1,343,014)	22,208,980	1,514,937	_
Affiliated International E	quity Funds –	<b>- 9.8</b> %						
Penn Series Developed								
International Index	4 450 077	244.050	400.040	24.025	(202.427)	4 442 067	04.450	
Fund*	1,158,077	314,050	189,048	34,025	(203,137)	1,113,967	91,159	_
Penn Series International Equity Fund*	1,158,077	178,194	702,857	157,846	(231,767)	559,493	21,105	_
Equity Fulla							۷۱,۱۷۶	
	\$57,920,422	\$15,002,361	\$13,993,783	700/ ۱۶۱,۵۷/	<u>\$(3,779,634</u> )	\$56,341,173		<u>\$—</u>

<sup>\*</sup> Non-income producing security.

#### 5 — Purchases and Sales of Securities

During the year ended December 31, 2018, the Funds made the following purchases and sales of portfolio securities, other than short-term securities:

	U.S Governm	ent Securities	Other Investm	ent Securities
	Purchases	Sales	Purchases	Sales
Limited Maturity Bond Fund	\$ 51,983,383	\$ 51,930,972	\$ 165,824,328	\$ 128,673,991
Quality Bond Fund	115,442,171	179,500,595	158,973,483	153,677,188
High Yield Bond Fund		_	178,965,424	182,742,739
Flexibly Managed Fund	234,086,451	239,801,843	2,636,838,692	2,340,766,758
Balanced Fund		_	6,473,663	13,708,565
Large Growth Stock Fund		_	133,061,510	156,357,234
Large Cap Growth Fund		_	14,264,015	20,124,657
Large Core Growth Fund		_	91,647,232	101,156,986
Large Cap Value Fund	_	_	204,217,765	219,743,849

	<b>U.S Government Securities</b>		Other Investm	nent Securities
	Purchases	Sales	Purchases	Sales
Large Core Value Fund	\$ —	\$ —	\$155,839,357	\$183,910,254
Index 500 Fund	_	_	14,091,534	62,068,522
Mid Cap Growth Fund	_	_	51,275,717	62,284,198
Mid Cap Value Fund	_	_	55,710,314	68,465,604
Mid Core Value Fund	_	_	53,955,939	61,044,077
SMID Cap Growth Fund	_	_	54,691,191	56,810,733
SMID Cap Value Fund	_	_	52,014,510	42,413,212
Small Cap Growth Fund	_	_	22,407,880	29,558,244
Small Cap Value Fund	_	_	136,113,413	157,200,077
Small Cap Index Fund	_	_	11,622,205	14,553,597
Developed International Index Fund	_	_	3,306,433	5,462,803
International Equity Fund	_	_	165,977,630	200,941,821
Emerging Markets Fund	_	_	74,059,669	82,824,202
Real Estate Securities Fund	_	_	83,155,158	95,013,958
Aggressive Allocation Fund	_	_	13,431,131	17,586,557
Moderately Aggressive Allocation Fund	_	_	35,140,585	66,507,950
Moderate Allocation Fund	_	_	46,375,631	79,811,017
Moderately Conservative Allocation Fund	_	_	16,322,659	22,426,919
Conservative Allocation Fund	_	_	13,002,361	13,993,783

#### 6 — FEDERAL INCOME TAXES

Each Fund has qualified and intends to continue to qualify as a regulated investment company ("RIC") under Subchapter M of the Internal Revenue Code for federal income tax purposes. As such, each Fund is required to distribute all investment company taxable income and net capital gains, if any, to its shareholders in order to avoid the imposition of entity-level federal, state, and local income taxes as well as an entity-level excise tax. Except for the Money Market Fund, to the extent any Fund had undistributed investment company taxable income and net capital gains at December 31, 2018, such undistributed investment company taxable income and net capital gains were deemed distributed as consent dividends in place of regular distributions. Accordingly, no provision has been made for federal, state, or local income and excise taxes.

On December 22, 2010, The Regulated Investment Company Modernization Act of 2010 (the "Act") was signed into law. The Act amended several tax rules impacting the Funds. Some highlights of the enacted provisions are as follows:

The Act allows for capital losses occurring in the taxable years beginning after December 22, 2010 ("post-enactment losses") to be carried forward indefinitely. However, the Act requires any future gains to be first offset by post-enactment losses before using capital losses incurred in the taxable years beginning prior to the effective date of the Act ("pre-enactment losses"). As a result of this ordering rule, pre-enactment loss carryforwards have an increased likelihood to expire unused. Furthermore, post-enactment losses will retain their character as either long-term capital losses or short-term capital losses rather than being considered all short-term capital losses as under previous law.

The Act provides that a RIC may elect for any taxable year to treat any portion of any qualified late-year loss for such taxable year as arising on the first day of the following taxable year. The term "qualified late-year loss" means any post-October capital loss and any late-year ordinary loss.

The Act also contains simplification provisions, which are aimed at preventing disqualification of a RIC for "inadvertent" failures of the asset diversification and/or qualifying income tests.

#### **Reclassification of Capital Accounts:**

Dividends from net investment income and distributions from net realized capital gains are determined in accordance with U.S. federal income tax regulations, which may differ from those amounts determined under U.S. GAAP. These book/tax differences are either temporary or permanent in nature. To the extent these differences are permanent, they are

charged or credited to paid-in capital or accumulated net realized gain or net investment income, as appropriate, in the period that the differences arise. Accordingly, the following permanent differences as of December 31, 2018, primarily attributable to consent dividends, were reclassed between the following accounts:

	Total distributable earnings (loss)	Increase (Decrease) Paid-in Capital
Money Market Fund	\$ 549	\$ (549)
Limited Maturity Bond Fund	(6,315,701)	6,315,701
Quality Bond Fund	(13,040,425)	13,040,425
High Yield Bond Fund	(8,362,253)	8,362,253
Flexibly Managed Fund	(310,060,004)	310,060,004
Balanced Fund	(6,475,525)	6,475,525
Large Growth Stock Fund	(36,539,499)	36,539,499
Large Cap Growth Fund	(5,363,372)	5,363,372
Large Core Growth Fund	(16,061,173)	16,061,173
Large Cap Value Fund	(48,292,656)	48,292,656
Large Core Value Fund	(24,100,351)	24,100,351
Index 500 Fund	(41,347,160)	41,347,160
Mid Cap Growth Fund	(10,454,343)	10,454,343
Mid Cap Value Fund	(20,103,454)	20,103,454
Mid Core Value Fund	(10,151,424)	10,151,424
SMID Cap Growth Fund	(8,830,589)	8,830,589
SMID Cap Value Fund	(11,161,759)	11,161,759
Small Cap Growth Fund	(10,172,560)	10,172,560
Small Cap Value Fund	(23,126,162)	23,126,162
Small Cap Index Fund	(7,077,680)	7,077,680
Developed International Index Fund	(2,950,956)	2,950,956
International Equity Fund	(44,005,423)	44,005,423
Emerging Markets Equity Fund	(14,738,525)	14,738,525
Real Estate Securities Fund	(6,809,037)	6,809,037
Aggressive Allocation Fund	(5,986,883)	5,986,883
Moderately Aggressive Allocation Fund	(25,362,818)	25,362,818
Moderate Allocation Fund	(26,951,467)	26,951,467
Moderately Conservative Allocation Fund	(6,722,196)	6,722,196
Conservative Allocation Fund	(2,998,435)	2,998,435

These reclassifications had no effect on net assets or net asset value per share.

#### Tax character of distributions:

The tax character of dividends and distributions declared and paid or deemed distributed during the years ended December 31, 2018 and 2017 were as follows:

		Income and Capital Gains	Long-Term (	Capital Gains	To	tal
	2018	2017	2018	2017	2018	2017
Money Market Fund	\$ 510,090	\$ 10,464	\$ —	\$ 67	\$ 510,090	\$ 10,531
Limited Maturity Bond Fund	6,315,701	4,233,777	_	_	6,315,701	4,233,777
Quality Bond Fund	13,040,425	13,597,499	_	1,219,536	13,040,425	14,817,035
High Yield Bond Fund	8,362,253	8,255,829	_	_	8,362,253	8,255,829
Flexibly Managed Fund	89,066,857	104,915,023	220,993,192	208,128,887	310,060,049	313,043,910
Balanced Fund	1,618,911	1,606,660	10,217,792	7,967,890	11,836,703	9,574,550
Large Growth Stock Fund	_	1,075,448	36,763,217	51,039,107	36,763,217	52,114,555
Large Cap Growth Fund	362,647	445,139	5,000,739	3,084,063	5,363,386	3,529,202
Large Core Growth Fund	1,333,604	6,153,058	14,727,569	10,961,685	16,061,173	17,114,743
Large Cap Value Fund	2,815,584	4,123,354	45,477,072	10,697,686	48,292,656	14,821,040
Large Core Value Fund	7,011,734	7,880,939	17,088,617	15,251,888	24,100,351	23,132,827
Index 500 Fund	7,526,980	7,860,846	33,820,180	16,586,730	41,347,160	24,447,576
Mid Cap Growth Fund	_	443,281	10,785,921	2,443,718	10,785,921	2,886,999
Mid Cap Value Fund	4,999,980	1,397,474	15,103,474	11,670,301	20,103,454	13,067,775
Mid Core Value Fund	2,270,928	2,651,933	7,880,710	8,481,515	10,151,638	11,133,448
SMID Cap Growth Fund	1,006,750	3,697,969	7,823,839	1,321,078	8,830,589	5,019,047
SMID Cap Value Fund	1,362,793	357,939	9,798,966	9,245,718	11,161,759	9,603,657
Small Cap Growth Fund	873,747	610,391	9,301,326	8,246,693	10,175,073	8,857,084
Small Cap Value Fund	1,177,178	7,020,337	21,948,984	20,620,173	23,126,162	27,640,510
Small Cap Index Fund	1,036,352	1,050,349	6,041,328	5,036,917	7,077,680	6,087,266
Developed International						
Index Fund	2,350,632	2,474,911	600,324	_	2,950,956	2,474,911
International Equity Fund	2,499,808	1,766,962	41,505,615	41,510,124	44,005,423	43,277,086
Emerging Markets Equity						
Fund	1,647,468	406,498	13,091,057	_	14,738,525	406,498
Real Estate Securities Fund	2,616,827	4,326,082	4,192,210	3,691,359	6,809,037	8,017,441
Aggressive Allocation Fund	1,038,455	1,092,797	12,328,888	9,233,911	13,367,343	10,326,708
Moderately Aggressive						
Allocation Fund	3,861,611	4,199,292	44,887,924	31,884,835	48,749,535	36,084,127
Moderate Allocation Fund	6,036,319	6,271,347	46,404,803	43,919,512	52,441,122	50,190,859
Moderately Conservative						
Allocation Fund	2,086,905	1,986,943	10,926,807	11,224,977	13,013,712	13,211,920
Conservative Allocation						
Fund	1,486,148	1,292,069	4,400,064	4,205,025	5,886,212	5,497,094

Short-term gain distributions to shareholders are treated as ordinary income for tax purposes.

#### **Capital loss carryforwards:**

At December 31, 2018, the following Funds had capital loss carryforwards (post-enactment losses) available to offset future realized capital gains:

	Short-Term Capital Loss	Capital Loss
Money Market Fund	\$ 10	\$ —
Limited Maturity Bond Fund	150,089	930,253
Quality Bond Fund	329,688	2,669,971
High Yield Bond Fund	4,967,505	3,688,910

During the year ended December 31, 2018, the following Funds utilized capital loss carryforwards to offset realized capital gains for federal income tax purposes in the following approximate amounts:

High Yield Bond Fund	\$322,990
Developed International Index Fund	291,137

#### **Qualified Late-Year Losses:**

The following Funds elected to treat the qualified late-year losses as having occurred on January 1, 2019:

	Late-Year Ordinary Losses	Late-Year Capital Losses
Money Market Fund	\$ —	\$ 70
Limited Maturity Bond Fund	_	23,868
High Yield Bond Fund	_	522,789
Large Growth Stock Fund	88	467,939
Large Core Growth Fund	401	755 <b>,</b> 430
Large Cap Value Fund	_	851,804
Large Core Value Fund	_	34,062
Index 500 Fund	_	175,703
Mid Cap Growth Fund	_	960,795
Mid Cap Value Fund	_	1,493,518
Mid Core Value Fund	_	29,874
SMID Cap Value Fund	_	160,098
Small Cap Value Fund	_	867,907
Small Cap Index Fund	3,669	_
Developed International Index Fund	93,118	242,706
International Equity Fund	128,153	1,364,582
Emerging Markets Equity Fund	346,653	1,335,204
Conservative Allocation Fund	_	3,457

#### Tax cost of securities:

At December 31, 2018, the total cost of securities and net realized gains or losses on securities sold for federal income tax purposes were different from amounts reported for financial reporting purposes. The federal tax cost, aggregate gross unrealized appreciation and depreciation of securities held by each Fund at December 31, 2018 were as follows:

	Federal Tax Cost	Unrealized Appreciation	Unrealized Depreciation	Appreciation/ (Depreciation)
Money Market Fund	\$110,872,873	\$ 1	\$ —	\$ 1
Limited Maturity Bond Fund	239,255,338	644,921	(4,061,555)	(3,416,634)

	Federal Tax Cost	Unrealized Appreciation	Unrealized Depreciation	Net Unrealized Appreciation/ (Depreciation)
Quality Bond Fund	\$ 432,635,836	\$ 2,651,029	\$ (9,956,623)	\$ (7,305,594)
High Yield Bond Fund	155,705,459	61,809	(6,490,666)	(6,428,857)
Flexibly Managed Fund	3,489,011,013	346,564,721	(144,180,551)	202,384,170
Balanced Fund	49,998,396	26,812,688	(1,841,671)	24,971,017
Large Growth Stock Fund	232,683,482	65,364,580	(17,489,425)	47,875,155
Large Cap Growth Fund	43,875,301	11,464,772	(1,927,988)	9,536,784
Large Core Growth Fund	107,992,127	15,054,356	(4,938,842)	10,115,514
Large Cap Value Fund	192,207,140	8,797,780	(22,112,713)	(13,314,933)
Large Core Value Fund	184,897,686	8,242,628	(17,764,149)	(9,521,521)
Index 500 Fund	226,765,467	208,619,530	(21,755,597)	186,863,933
Mid Cap Growth Fund	92,462,524	23,949,828	(5,177,032)	18,772,796
Mid Cap Value Fund	145,700,570	15,931,965	(22,028,394)	(6,096,429)
Mid Core Value Fund	88,579,596	3,408,973	(13,258,390)	(9,849,417)
SMID Cap Growth Fund	60,555,661	4,942,103	(6,792,407)	(1,850,304)
SMID Cap Value Fund	87,354,965	5,044,639	(12,309,185)	(7,264,546)
Small Cap Growth Fund	75,966,617	23,075,021	(7,355,492)	15,719,529
Small Cap Value Fund	208,132,605	23,960,973	(23,802,278)	158,695
Small Cap Index Fund	60,471,042	19,994,654	(11,142,824)	8,851,830
Developed International Index Fund	86,400,833	27,755,858	(17,290,560)	10,465,298
International Equity Fund	291,041,615	33,736,332	(29,705,824)	4,030,508
Emerging Markets Equity Fund	143,250,377	18,896,073	(13,334,917)	5,561,156
Real Estate Securities Fund	115,205,156	7,158,296	(6,761,044)	397,252
Aggressive Allocation Fund	57,551,241	6,797,546	(177,068)	6,620,478
Moderately Aggressive Allocation Fund	183,624,949	34,290,898	(575,620)	33,715,278
Moderate Allocation Fund	246,125,001	46,519,064	(745,586)	45,773,478
Moderately Conservative Allocation Fund	79,517,145	9,678,547	(252,608)	9,425,939
Conservative Allocation Fund	53,833,003	3,578,631	(293,717)	3,284,914

The differences between book basis and tax basis appreciation are primarily due to wash sales, Passive Foreign Investment Companies, Partnership Investments, Trust Preferred Securities, real estate investment trust adjustments, and the treatment of certain corporate actions.

It is each Fund's policy to continue to comply with the requirements of the Internal Revenue Code under Subchapter M, applicable to regulated investment companies, and to distribute all of its taxable income, including any net realized gains on investments, to its shareholders. Therefore, no provision is made for federal income taxes.

Management of the Funds has reviewed tax positions taken in tax years that remain subject to examination by all major tax jurisdictions, including federal (i.e., the last four tax year ends and the interim tax period since then, as applicable). Management believes that there is no tax liability resulting from unrecognized tax benefits related to uncertain tax positions taken.

#### 7 — DERIVATIVE FINANCIAL INSTRUMENTS

The Funds may trade derivative financial instruments in the normal course of investing activities to assist in managing exposure to market risks such as interest rates and foreign currency exchange rates. These financial instruments include purchase options, written options, forward foreign currency exchange contracts and futures contracts.

The notional or contractual amounts of these instruments represent the investment the Funds have in particular classes of financial instruments and do not necessarily represent the amounts potentially subject to risk. The measurement of the risks associated with these instruments is meaningful only when all related and offsetting transactions are considered.

**Futures Contracts** — A futures contract is a standardized contract between two parties to buy or sell a specified asset at a specified future date at a price agreed today (the future price). The party agreeing to buy the underlying asset in the future assumes a long position. The price is determined by the instantaneous equilibrium between the forces of supply and demand among competing buy and sell orders on the exchange at the time of the purchase or sale of the contract.

To the extent permitted by the investment objective, restrictions and policies set forth in the Funds' Prospectus and Statement of Additional Information, the Funds may participate in various derivative-based transactions. The Index 500, Developed International Index and Small Cap Index Funds employ futures to maintain market exposure and otherwise assist in attempting to replicate the performance of their respective indices. These derivatives offer unique characteristics and risks that assist the Funds in meeting their investment objectives. The Funds typically use derivatives in two ways: cash equitization and return enhancement. Cash equitization is a technique that may be used by the Funds through the use of futures contracts to earn "market-like" returns with the Funds' excess and liquidity reserve cash balances and receivables. Return enhancement can be accomplished through the use of derivatives in the Funds. By purchasing these instruments, the Funds may more effectively achieve the desired fund characteristics that assist in meeting the Funds' investment objectives.

Futures contracts involve a number of risks, such as possible default by the counterparty to the transaction, credit risk with respect to initial and variation margins held in a brokerage account, market movement and the potential of greater loss than if these techniques had not been used by a Fund. These investments can also increase the Fund's share price and expose the Fund to significant additional costs.

The Limited Maturity Bond, Quality Bond, Index 500, Small Cap Index and Developed International Index Funds have entered into futures contracts during the year ended December 31, 2018. Open futures contracts held by the Limited Maturity Bond, Quality Bond, Index 500, Developed Small Cap Index and International Index Funds at December 31, 2018 are listed after the Fund's Schedule of Investments.

**Options** — An option establishes a contract between two parties concerning the buying or selling of an asset at a reference price. The buyer of the option gains the right, but not the obligation, to engage in some specific transaction on the asset, while the seller incurs the obligation to fulfill the transaction if so requested by the buyer. The price of an option derives from the difference between the reference price and the value of the underlying asset plus a premium based on the time remaining until the expiration of the option. The Funds may buy and sell options, or write options.

Options are valued daily based upon the last sale price on the principal exchange on which the option is traded. The difference between the premium received or paid, and market value of the option, is recorded as unrealized appreciation or depreciation. The net change in unrealized appreciation or depreciation is reported in the Statements of Operations. When an option is exercised, the cost of the security purchased or the proceeds of the security sale are adjusted by the amount of premium received or paid. Upon the expiration or closing of the option transaction, a gain or loss is reported in the Statements of Operation.

The Flexibly Managed and Mid Cap Growth Funds received premiums for options written. The risk in writing a call option is that the Funds give up the opportunity for profit if the market price of the security increases and the option is exercised. The risk in writing a put option is that the Funds may incur a loss if the market price of the security decreases and the option is exercised. The risk in buying an option is that the Funds pay a premium whether or not the option is exercised. The Funds also have the additional risk that there may be an illiquid market where the Funds are unable to close the contract.

The total market value of written options held in the Flexibly Managed Fund as of December 31, 2018 can be found on the Schedule of Investments.

Forward Foreign Currency Contracts — A forward currency contract involves an obligation to purchase or sell a specific currency at a future date, which may be any number of days from the date of the contract agreed upon by the parties, at a price set at the time of the contract. These contracts are traded directly between currency traders and their customers. The contract is marked-to-market daily and the change in market value is recorded by each Fund as an unrealized gain or loss. When the contract is closed or offset with the same counterparty, the Fund records a realized gain or loss equal to the change in the value of the contract when it was opened and the value at the time it was closed or offset.

The High Yield Bond Fund, Mid Core Value Fund and Emerging Markets Equity Fund entered into forward currency contracts in conjunction with the planned purchase or sale of foreign denominated securities in order to hedge the U.S. dollar cost or proceeds. The Fund hedged currencies in times of base currency weakness in order to reduce the volatility of returns for the local securities which the Fund owns.

Foreign forward currency contracts involve a number of risks, including the possibility of default by the counterparty to the transaction and, to the extent the portfolio manager's judgment as to certain market movements is incorrect, the risk of losses that are greater than if the investment technique had not been used. For example, there may be an imperfect correlation between the Fund's portfolio holdings of securities denominated in a particular currency and the forward contracts entered into by the Fund. An imperfect correlation of this type may prevent the Fund from achieving the intended hedge or expose the Fund to the risk of currency exchange loss. These investment techniques also tend to limit any potential gain that might result from an increase in the value of the hedged position. These investments can also increase the volatility of the Fund's share price and expose the Fund to significant additional costs. The forward foreign currency contracts outstanding are listed after the Fund's Schedule of Investments.

The following is a summary of the location of derivatives on the Funds' Statements of Assets and Liabilities as of December 31, 2018:

	Location on the Statements of Assets and Liabilities			
Derivative Type	<b>Asset Derivatives</b>	Liability Derivatives		
Equity contracts	Investments at value	Call options written, at value		
	Futures variation margin receivable*	Futures variation margin payable*		
Foreign currency contracts	Net unrealized appreciation of forward	Net unrealized depreciation of forward		
	foreign currency contracts	foreign currency contracts		
Interest rate contracts	Futures variation margin receivable*	Futures variation margin payable*		

<sup>\*</sup> Includes cumulative appreciation/depreciation of futures contracts as reported in the footnotes. Only current day's variation margin is reported within the Statements of Assets and Liabilities.

For financial reporting purposes, the Funds do not offset derivative assets and derivative liabilities that are subject to netting arrangements in the Statements of Assets and Liabilities. The following is a summary of the gross amount of each Fund's derivative instrument holdings categorized by primary risk exposure as of December 31, 2018:

	ASSET DERIVATIVE VALUE			LIABILITY DERIVATIVE VALUE			
	<b>Equity Contracts</b>	Foreign currency contracts	Interest rate contracts	<b>Equity Contracts</b>	Foreign currency contracts	Interest rate contracts	
Limited Maturity							
Bond Fund	\$ <del></del>	\$ —	\$ 442,745	\$ —	\$ —	\$ <del></del>	
<b>Quality Bond Fund</b>	_	_	2,386,304	_	_	_	
Flexibly Managed							
Fund	_	_	_	(13,942,582)	_	_	
Index 500 Fund	_	_	_	(214,395)	_	_	
Mid Core Value							
Fund	_	5 <b>,</b> 871	_	_	(44,388)	_	
Small Cap Index							
Fund	_	_	_	(74,366)	_	_	
Developed							
International							
Index Fund	_	_	_	(69,281)	_	_	
<b>Emerging Markets</b>							
Fund	_	61,129	_	_	(308,297)		

In order to better define their contractual rights and to secure rights that will help the Funds mitigate their counterparty risk, the Funds may participate in International Swaps and Derivatives Association, Inc. Master Agreements ("ISDA Master Agreement" or "ISDA") with derivative contract counterparties or enter into similar agreements covering foreign exchange contracts ("Fx Letters"). An ISDA Master Agreement is a bilateral agreement between a Fund and a counterparty that governs over-the-counter ("OTC") traded derivatives and foreign exchange contracts and typically contains, among other things, collateral posting terms and netting provisions in the event of a default and/or termination event. Under an ISDA Master Agreement, a Fund may, under certain circumstances, offset with the counterparty certain derivative financial instrument's payables and/or receivables with collateral held and/or posted and create one single net payment. The provisions of the ISDA Master Agreement typically permit a single net payment in the event of default (close-out netting) including the bankruptcy or insolvency of the counterparty. Also, bankruptcy or insolvency laws of a particular jurisdiction may impose restrictions on or prohibitions against the right of offset in bankruptcy, insolvency or other events. An Fx Letter is also a bilateral agreement between a Fund and a counterparty and is limited to cover only foreign exchange contracts. Fx Letters typically contain netting provisions covering events of default and do not require collateral to be posted. ISDAs and Fx Letters containing netting provisions may be referred to as Master Netting Agreements ("MNA").

Collateral and margin requirements differ by type of derivative. Margin requirements are established by the broker for OTC traded derivatives or by the clearing house for exchange traded derivatives. Brokers can ask for margining in excess of the minimum in certain circumstances. Collateral terms are contract specific for OTC derivatives (foreign currency exchange contracts and options). For derivatives traded under an ISDA Master Agreement, the collateral requirements are typically calculated by netting the mark to market amount for each transaction under such agreement and comparing that amount to the value of any collateral currently pledged by a Fund and the counterparty. Generally, the amount of collateral due from or to a party has to exceed a minimum transfer amount threshold before a transfer has to be made. To the extent amounts due to a Fund from its counterparties are not fully collateralized, contractually or otherwise, the Fund bears the risk of loss from counterparty non-performance. The Fund attempts to mitigate counterparty risk by only entering into agreements with counterparties that it believes have the financial resources to honor their obligations and by monitoring the financial stability of those counterparties.

The following table presents derivative assets and liabilities net of amounts available for offset under a MNA and, as applicable, the related collateral and potential loss exposure to each Fund as of December 31, 2018:

# Gross Amounts Presented on Statements of Assets and Liabilities

	_			_			
Fund and Counterparty	Form of Master Netting Agreement	Value of Assets	Value of Liabilities	Net Amount Due (to)/from Counterparty	Collateral Pledged (Received by Fund	Loss Exposure, After Collateral (note less than \$0)	
Flexibly Managed Fund							
Citigroup	ISDA	<u> </u>	<u>\$(13,942,582</u> )	<u>\$(13,942,582</u> )	<u>\$—</u>	<u>\$(13,942,582</u> )	
Mid Core Value Fund							
Bank of America	Fx Letter	\$ 120	\$ (11,227)	(11,107)	\$—	(11,107)	
Credit Suisse	Fx Letter		(4,894)	(4,894)	_	(4,894)	
Goldman Sachs	Fx Letter	660	(23,434)	(22,774)	_	(22,774)	
JP Morgan	Fx Letter		(4,786)	(4,786)	_	(4,786)	
Morgan Stanley	Fx Letter	5,091	(47)	5,044		5,044	
Total		\$ 5 <b>,</b> 871	\$ (44,388)	<u>\$ (38,517)</u>	<u>\$—</u>	<u>\$ (38,517)</u>	
Emerging Markets Equity Fund							
UBS Securities	Fx Letter	\$61,129	\$ (308,297)	<u>\$ (247,168)</u>	<u>\$—</u>	<u>\$ (247,168</u> )	

**Portfolio** 

The following is a summary of the location of derivatives on the Funds' Statements of Operations as of December 31, 2018:

Derivative Type	Location of Gain (Loss) on Derivatives Recognized in Income
Equity contracts	Net realized gain (loss) on futures contracts
	Net realized gain (loss) on purchased options
	Net realized gain (loss) on written options
	Net change in unrealized appreciation (depreciation) of futures contracts
	Net change in unrealized appreciation (depreciation) of purchased options
	Net change in unrealized appreciation (depreciation) of written options
Interest rate contracts	Net realized gain (loss) on futures contracts
	Net change in unrealized appreciation (depreciation) of futures contracts
Foreign currency contracts	Net realized gain (loss) on forward foreign currency contracts Net change in unrealized appreciation (depreciation) of forward foreign currency contracts

Fund Realized Gain (Loss) on Derivatives Recognized in Income Foreign currency Interest rate **Equity Contracts** contracts contracts Limited Maturity Bond Fund \$ \$(454,470) **Quality Bond Fund** (726,360)High Yield Fund 158,568 Flexibly Managed Fund 5,474,963 Large Cap Growth Fund 2,101 Large Core Growth Fund (8,865)Index 500 Fund (175,192)Mid Cap Growth Fund (55,618)Mid Core Value Fund 203,459 Small Cap Index Fund 59,986 Developed International Index Fund (267)(342,153)International Equity Fund (456,207)**Emerging Markets Equity Fund** 380,389

### Change in Unrealized Appreciation (Depreciation) on Derivatives Recognized in Income

1 01 (10110		Recognized in income			
	Equity contracts	Foreign currency contracts	Interest rate contracts		
Limited Maturity Bond Fund	\$ —	\$ —	\$ 565,525		
Quality Bond Fund	<del></del>	<del>_</del>	2,203,805		
High Yield Fund	_	333	<del></del>		
Flexibly Managed Fund	36,336,332	<del>_</del>	<del></del>		
Index 500 Fund	(251,514)	<del>_</del>	_		
Mid Cap Growth Fund	14,896	_	<del>_</del>		
Mid Core Value Fund	_	12,675	<del></del>		
Small Cap Index Fund	(105,964)	<del>_</del>	<del></del>		
Developed International Index Fund	(103,444)	<del>_</del>	<del></del>		
Emerging Markets Equity Fund	_	(247,168)	_		

The table below summarizes the average balance of derivative holdings by Fund during the year ended December 31, 2018. The average balance of derivatives held is indicative of the trading volume of each Fund.

	Average Derivative Volume				
Portfolio	Forward foreign currency contracts (average cost)	Future contracts (average notional value) long	Future contracts (average notional value) short	Purchased options (average notional cost)	Written options (premiums received)
Limited Maturity Bond Fund	\$ —	\$80,745,993	\$ 7,689,140	\$ —	<u> </u>
Quality Bond Fund	_	60,006,515	13,143,180	_	<del>-</del>
High Yield Fund	1,218,690	<del>-</del>	_	_	_
Flexibly Managed Fund	· · · · · · · · · · · · · · · · · · ·	_	_	498,804	16,461,715
Index 500 Fund	_	3,912,558			_
Mid Cap Growth Fund	_	_	_	28,139	6,641
Mid Core Value Fund	3,668,899	_		_	_
Small Cap Index Fund	_	1,192,087	_	_	
Developed International Index Fund	_	2,511,817		_	
Emerging Markets Equity Fund	17,173,907	_	_	_	_

#### 8 — CREDIT AND MARKET RISK

The Funds may invest a portion of their assets in illiquid securities, which may include securities with contractual restrictions on resale, securities exempt from registration under Rule 144A of the Securities Act of 1933, as amended, and other securities which may not be readily marketable. The relative illiquidity of these securities may impair the Funds' ability to dispose of them in a timely manner and at a fair price when it is necessary or preferable to do so.

The high yield securities in which the High Yield Bond Fund may invest are predominantly speculative as to the issuer's continuing ability to meet principal and interest payments. The value of the lower quality securities in which the High Yield Bond Fund may invest will be affected by the credit worthiness of individual issuers, general economic and specific industry conditions, and will fluctuate inversely with changes in interest rates. In addition, the secondary trading market for lower quality bonds may be less active and less liquid than the trading market for higher quality bonds.

The Flexibly Managed, Large Growth Stock, Large Cap Growth, Mid Cap Growth, Mid Core Value, Small Cap Growth, Developed International Index, International Equity and the Emerging Markets Equity Funds invest in securities of foreign issuers in various countries. These investments may involve certain considerations and risks not typically associated with investments in the United States, as a result of, among other factors, the possibility of future political and economic developments and the level of governmental supervision and regulation of securities markets in the respective countries.

#### 9 — CONTRACTUAL OBLIGATIONS

In the general course of business, the Funds enter into contracts that contain a variety of representations and warranties and which provide general indemnification. The Funds' maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Funds and/or its affiliates that have not yet occurred. However, based on experience, management of the Funds expects the risk of loss to be remote.

#### 10 — RECENT ACCOUNTING PRONOUNCEMENTS and REPORTING UPDATES

In August 2018, the FASB issued an ASU 2018-13, which changes certain fair value measurement disclosure requirements. The ASU 2018-13, in addition to other modifications and additions, removes the requirement to disclose the amount and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, the policy for the timing of transfers between levels and the valuation process for Level 3 fair value measurements. The ASU 2018-13 is effective for fiscal years, and interim periods within those fiscal years, beginning after Dec. 15, 2019. At this time, management is evaluating the implications of these changes on the financial statements.

In August 2018, the Securities and Exchange Commission (SEC) adopted amendments to Regulation S-X to update and simplify the disclosure requirements for registered investment companies by eliminating requirements that are redundant or duplicative of US GAAP requirements or other SEC disclosure requirements. The new amendments require the presentation of the total, rather than the components, of distributable earnings on the "Statement of assets and liabilities" and the total, rather than the components, of dividends from net investment income and distributions from net realized gains on the "Statements of changes in net assets." The amendments also removed the requirement for the parenthetical disclosure of undistributed net investment income on the "Statements of changes in net assets" and certain tax adjustments that were reflected in the "Notes to financial statements." All of these have been reflected in the Fund's financial statements.

#### 11 — Subsequent Events

Management has evaluated the impact of all subsequent events on the Funds through the date the financial statements were issued and has determined that no additional subsequent events require recognition or disclosure in the financial statements.

#### Report of Independent Registered Public Accounting Firm

To the Shareholders of the Funds and Board of Directors Penn Series Funds, Inc.:

#### Opinion on the Financial Statements

We have audited the accompanying statements of assets and liabilities of Penn Series Funds, Inc., comprised of the Money Market Fund, Limited Maturity Bond Fund, Quality Bond Fund, High Yield Bond Fund, Flexibly Managed Fund, Balanced Fund, Large Growth Stock Fund, Large Cap Growth Fund, Large Core Growth Fund, Large Cap Value Fund, Index 500 Fund, Mid Cap Growth Fund, Mid Cap Value Fund, Mid Core Value Fund, SMID Cap Growth Fund, SMID Cap Value Fund, Small Cap Index Fund, Developed International Index Fund, International Equity Fund, Emerging Markets Equity Fund, Real Estate Securities Fund, Aggressive Allocation Fund, Moderately Aggressive Allocation Fund, Moderately Aggressive Allocation Fund, Moderate Allocation Fund, Moderately Conservative Allocation Fund, and Conservative Allocation Fund (collectively, the Funds), including the schedules of investments, as of December 31, 2018, the related statements of operations for the year then ended, the statements of changes in net assets for each of the years in the two-year period then ended, and the related notes (collectively, the financial statements) and the financial highlights for each of the years in the five-year period then ended. In our opinion, the financial statements and financial highlights present fairly, in all material respects, the financial position of each of the Funds as of December 31, 2018, the results of their operations for the year then ended, changes in their net assets for each of the years in the two-year period then ended, and the financial highlights for each of the years in the five-year period then ended, in conformity with U.S. generally accepted accounting principles.

#### **Basis for Opinion**

These financial statements and financial highlights are the responsibility of the Funds' management. Our responsibility is to express an opinion on these financial statements and financial highlights based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Funds in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements and financial highlights are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements and financial highlights, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements and financial highlights. Such procedures also included confirmation of securities owned as of December 31, 2018, by correspondence with custodians, transfer agents, or brokers, or by other appropriate auditing procedures when replies were not received. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements and financial highlights. We believe that our audits provide a reasonable basis for our opinion.



We have served as the auditor of one or more Penn Series Funds, Inc. investment companies since 2004.

Philadelphia, Pennsylvania February 22, 2019

#### Tax Information (unaudited)

Each Fund reports the following amounts distributed during the year ended December 31, 2018 as capital gain dividends:

Fund	Long-Term Capital Gain
Flexibly Managed Fund	\$220,993,192
Balanced Fund	10,217,792
Large Growth Stock Fund	36,763,217
Large Cap Growth Fund	5,000,739
Large Core Growth Fund	14,727,569
Large Cap Value Fund	45,477,072
Large Core Value Fund	17,088,617
Index 500 Fund	33,820,180
Mid Cap Growth Fund	10,785,921
Mid Cap Value Fund	15,103,474
Mid Core Value Fund	7,880,710
SMID Cap Growth Fund	7,823,839
SMID Cap Value Fund	9,798,966
Small Cap Growth Fund	9,301,326
Small Cap Value Fund	21,948,984
Small Cap Index Fund	6,041,328
Developed International Index Fund	600,324
International Equity Fund	41,505,615
Emerging Markets Equity Fund	13,091,057
Real Estate Securities Fund	4,192,210
Aggressive Allocation Fund	12,328,888
Moderately Aggressive Allocation Fund	44,887,924
Moderate Allocation Fund	46,404,803
Moderately Conservative Allocation Fund	10,926,807
Conservative Allocation Fund	4,400,064

Each Fund reports the following percentages of ordinary income dividend paid during the year ended December 31, 2018 as being eligible for the dividends received deduction available to corporate shareholders:

<u>Fund</u>	
Quality Bond Fund	0.50%
High Yield Bond Fund	1.94%
Flexibly Managed Fund	87.86%
Balanced Fund	49.57%
Large Cap Growth Fund	100.00%
Large Core Growth Fund	54.96%
Large Cap Value Fund	100.00%
Large Core Value Fund	58.07%
Index 500 Fund	100.00%
Mid Cap Value Fund	44.03%
Mid Core Value Fund	64.94%
SMID Cap Growth Fund	40.62%
SMID Cap Value Fund	72.38%
Small Cap Growth Fund	100.00%
Small Cap Value Fund	100.00%
Small Cap Index Fund	60.55%
International Equity Fund	21.16%

## Penn Series Funds, Inc. December 31, 2018

#### Tax Information (unaudited) continued

Fund
------

Aggressive Allocation Fund	49.79%
Moderately Aggressive Allocation Fund	45.75%
Moderate Allocation Fund	30.96%
Moderately Conservative Allocation Fund	22.74%
Conservative Allocation Fund	14.23%

#### Disclosure of Portfolio Holdings

The SEC has adopted a requirement that all Funds file a complete schedule of investments with the SEC for their first and third fiscal quarters on Form N-Q. For the Penn Series Funds, Inc., this would be for the fiscal quarters ending March 31 and September 30. The Form N-Q filing is made within 60 days after the end of the quarter. Penn Series Funds, Inc. filed its most recent Form N-Q with the SEC on November 20, 2018. It is available on the SEC's website at <a href="http://www.sec.gov.">http://www.sec.gov.</a> or it may be reviewed and copied at the SEC's Public Reference Room in Washington, D.C. (call 1-202-551-8090 for information on the operation of the Public Reference Room).

#### **Voting Proxies on Fund Portfolio Securities**

A description of the policies and procedures that the Fund uses to determine how to vote proxies relating to securities held in the Fund's portfolios is available, without charge and upon request, on the Fund's website at <a href="http://www.pennmutual.com">http://www.pennmutual.com</a> or on the SEC's website at <a href="http://www.pennmutual.com">http://www.pennmutual.com</a> or on the priod ended June 30, 2018 is available on the Fund's website at <a href="http://www.pennmutual.com">http://www.pennmutual.com</a> and on the SEC's website at <a href="http://www.sec.gov">http://www.sec.gov</a>.

Penn Series Funds Management (Unaudited)

Name and Year of Birth	Position with the Company; Term of Office and Length of Time Served	Principal Occupation During Past 5 Years	Number of Funds Overseen by the Director	Other Directorships Held by Director During Past 5 Years
		INDEPENDENT DIRECTORS†		
Marie K. Karpinski (1949)*	Director; No set term; served since 2015.	Retired (2010 – Present).	29	None.
Joanne B. Mack (1946)*	Director; No set term; served since 2013.	Vice President – Financial Services Consulting, Trianz (2012 – 2013); Management Consultant, self-employed (2009 – 2012; 2013 – Present).	29	None.
Archie C. MacKinlay (1955)*	Director; No set term; served since 2010.	Professor of Finance, Wharton School, University of Pennsylvania (1984 – Present).	29	None.
Rebecca C. Matthias (1953)*	Director; No set term; served since 2010.	Retired (2010 – Present); President, Destination Maternity Corporation (clothing) (1982 – 2010).	29	Director, CSS Industries.
		INTERESTED DIRECTORS		
Eileen C. McDonnell (1962)*	Director and Chairperson of the Board; No set term; served since 2010.	Chief Executive Officer (2011 – Present), President (2010 – 2015), Chairperson of the Board (2013 – Present), Executive Vice President and Chief Marketing Officer (2008 – 2010), Penn Mutual; Director, PMAM (2010 – Present); President and Director (2010 – Present), Chairperson of the Board (2011 – Present), PIA.	29	Director, UHS of Delaware, Inc.
David B. Pudlin (1949)*	Director; No set term; served since 2009.	Chief Executive Officer, President and Attorney, Hangley Aronchick Segal Pudlin & Schiller (law firm) (1994 – Present).	29	None.

<sup>\*</sup> The address of each Director is: Penn Series Funds, Inc. 600 Dresher Road, Horsham, Pennsylvania 19044.

Name and Year of Birth	Position with the Company; Term of Office and Length of Time Served	Principal Occupation During Past 5 Years
David M. O'Malley (1974)*	President; One year; served since 2014.	OFFICERS  Chairperson and Chief Executive Officer, PMAM (2014 – Present); President and Chief Operating Officer (2016 – Present), Chief Operating Officer (2013 – 2015), Chief Financial Officer (2010 – 2013), Executive Vice President (2009 – 2013), Penn Mutual.
Steven Viola (1975)*	Treasurer One year; served since 2015.	Assistant Treasurer (2016 – Present), Senior Fund Accounting Analyst (2016 – 2017), PMAM; Senior Accountant, Penn Mutual (2005 – 2015).
Tyler J. Thur (1984)*	Assistant Treasurer One year; served since Feb. 2017.	Controller and Treasurer, PMAM (2015 – Present); Senior Financial Analyst, Penn Mutual (2011 – 2014).
Franklin L. Best, Jr. (1945)*	Secretary; One year; served since 2012.	Secretary, PMAM (2012 – Present); Vice President & General Counsel Insurance Operations & Corporate Secretary (2011 – Present), Managing Corporate Counsel and Secretary (2004 – 2011), Penn Mutual.

#### Penn Series Funds Management (Unaudited)

Name and Year of Birth	Position with the Company; Term of Office and Length of Time Served	Principal Occupation During Past 5 Years
Victoria Robinson (1965)*	Chief Compliance Officer One year; served since 2014.	Chief Operating Officer, PMAM (2017 – Present); Chief Compliance & Risk Officer, Managing Director, PMAM (2008 – Present); Assistant Vice President, Penn Mutual (2010 – 2015).
Robert Kaehler (1970)*	Anti-Money Laundering Officer One year; served since 2018.	Chief Compliance Officer, Distribution, Hornor, Townsend & Kent, LLC (January 2017 – Present); Anti-Money Laundering Compliance Officer, Penn Mutual (October 2018 – Present); Anti-Money Laundering Compliance Officer, Hornor, Townsend and Kent, LLC (October 2018 – Present); Senior Master Sargent, U.S. Air Force Reserves (February 1997 – Present); Vice President, On-Boarding Manager, J.P. Morgan Chase & Co. and JPM Asset Management, Global Liquidity (May 2013 – October 2016).

<sup>\*</sup> The address of each Officer is: Penn Series Funds, Inc. 600 Dresher Road, Horsham, Pennsylvania 19044.

Additional information about the Fund's Directors is available in the Fund's Statement of Additional Information, which is available upon request, without charge, by calling 1-800-523-0650.





The Penn Mutual Life Insurance Company
The Penn Insurance and Annuity Company





### Our Noble Purpose

Since 1847, Penn Mutual has been driven by our noble purpose — to create a world of possibilities, one individual, one family and one small business at a time. As an original pioneer of mutual life insurance in America, we believe that purchasing life insurance is the most protective, responsible and rewarding action a person can take to build a solid foundation today and create a brighter future for generations to come.

PM8534 02/19