

VARIABLE INSURANCE PORTFOLIOS

# Annual Report

**DECEMBER 31, 2019** 

#### **Ivy Variable Insurance Portfolios**

Asset Strategy	Class I	Class II
Balanced		Class II
Energy	Class I	Class II
Growth		Class II
High Income	Class I	Class II
International Core Equity		Class II
Mid Cap Growth	Class I	Class II
Natural Resources		Class II
Science and Technology	Class I	Class II
Small Cap Core		Class II
Small Cap Growth	Class I	Class II

Beginning on January 1, 2021, as permitted by regulations adopted by the U.S. Securities and Exchange Commission (SEC), you may not be receiving paper copies of the Fund's annual or semi-annual shareholder reports by mail, unless you specifically request paper copies of the reports from the insurance company that offers your variable annuity or variable life insurance contract or from your financial intermediary. Instead of delivering paper copies of the report, the insurance company may choose to make the reports available on a website, and will notify you by mail each time a shareholder report is posted and provide you with a website link to access the report. Instructions for requesting paper copies will be provided by your insurance company.

If you already elected to receive shareholder reports electronically, you will not be affected by this change and you need not take any action. You may elect to receive shareholder reports and other communications from the insurance company or your financial intermediary electronically by following the instructions provided by the insurance company or by contacting your financial intermediary.

You may elect to receive all future Fund shareholder reports in paper free of charge from the insurance company. You can inform the insurance company or your financial intermediary that you wish to continue receiving paper copies of your shareholder reports by following the instructions provided by the insurance company or by contacting your financial intermediary. Your election to receive reports in paper will apply to all portfolio companies available under your contract with the insurance company.

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DECEMBER 31, 2019 (UNAUDITED)



Philip J. Sanders, CFA

#### Dear Shareholder,

Following a sharp correction to end 2018, equity markets roared back during the fiscal year. The S&P 500 Index advanced more than 30% in 2019, and every sector posted gains. The rally had a pro-cyclical component, as information technology and communication services delivered the strongest sector returns, while energy and health care were the laggards.

The U.S. economy slowed in 2019, but remains in the longest economic expansion in U.S. history despite signs of global weakening. Waning benefits from U.S. fiscal stimulus, elevated inventory levels, Brexit chaos, a stronger U.S. dollar and the lagged effects of tighter monetary policy in places like the U.S. and China coalesced to weaken the pace of global growth. We believe some of those headwinds are reversing and could provide some lift to global growth in 2020.

Uncertainty around trade and the weakening of the global economy pressured the U.S. Federal Reserve (Fed) to reverse its policy during 2019. After projecting two rate hikes at the start of the fiscal year, the Fed cut interest rates three times in 2019, bringing the federal funds rate target range to 1.50–1.75%. Overall, we expect the Fed to leave rates unchanged throughout 2020.

Markets cheered the significant progress made toward a "phase one" U.S.-China trade deal in December, though we believe U.S. trade policy remains a wildcard and poses a threat to the current expansion. The uncertainty about the future of global trade created a significant slowing in the eurozone. In addition, uncertainty about the U.K.'s potential exit from the European Union triggered a further reduction in business confidence. The European Central Bank (ECB) announced additional easing in September, pushing interest rates further into negative territory and introducing another round of quantitative easing via bond purchases. While we believe average GDP growth in 2020 will be similar to the estimated 1.2% average in 2019, we expect the pace of eurozone growth to improve throughout 2020 on the back of a better global economy and reduced risks around trade and Brexit.

Emerging markets felt the effects of weak global trade in 2019, which led to disappointing economic growth overall. Despite near-term concerns and likely volatility across the global equity market, we believe the long-term fundamentals in emerging markets will continue to offer opportunities.

Looking ahead, we believe equities face intensifying headwinds as the pace of global growth slows and trade turmoil lingers. As we examine the investment landscape, we continue to put greater emphasis on the fundamentals and quality of asset classes and sectors. We believe it is important to stay focused on the merits of individual market sectors, industries and companies when making investment decisions. Those fundamentals historically have tended to outweigh external factors such as government policies and regulations. While those can affect every business and every investor, we think the innovation and management skill within individual companies are the ultimate drivers of long-term stock prices.

# **Economic Snapshot**

	12/31/2019	12/31/2018
S&P 500 Index	3,230.78	2,506.85
MSCI EAFE Index	2,036.94	1,719.88
10-Year Treasury Yield	1.92%	2.69%
U.S. unemployment rate	3.5%	3.9%
30-year fixed mortgage rate	3.74%	4.55%
Oil price per barrel	\$61.14	\$45.41

Sources: Bloomberg, U.S. Department of Labor, MBA, CME

All government statistics shown are subject to periodic revision. The S&P 500 Index is an unmanaged index that tracks the stocks of 500 primarily large-cap U.S. companies. MSCI EAFE Index is an unmanaged index comprised of securities that represent the securities markets in Europe, Australasia and the Far East. It is not possible to invest directly in any of these indexes. Mortgage rates are from BankRate and reflect the overnight national average rate on a conventional 30-year fixed loan. Oil prices reflect the market price of West Texas intermediate grade crude.

Respectfully,

Philip J. Sanders, CFA President

The opinions expressed in this letter are those of the President of the Ivy Variable Insurance Portfolios and are current only through the end of the period of the report, as stated on the cover. The President's views are subject to change at any time, based on market and other conditions, and no forecasts can be guaranteed.

#### **Expense Example**

As a shareholder of a Portfolio, you incur ongoing costs, including management fees, distribution and service fees, and other Portfolio expenses. The following table is intended to help you understand your ongoing costs (in dollars) of investing in a Portfolio and to compare these costs with the ongoing costs of investing in other mutual funds. The example is based on an investment of \$1,000 invested at the beginning of the period and held for the six-month period ended December 31, 2019.

#### **Actual Expenses**

The first section in the following table provides information about actual investment values and actual expenses for each share class. You may use the information in this section, together with your initial investment in Portfolio shares, to estimate the expenses that you paid over the period. Simply divide the value of that investment by \$1,000 (for example, a \$7,500 initial investment divided by \$1,000 = 7.5), then multiply the result by the number in the first section under the heading entitled "Expenses Paid during Period" to estimate the expenses you paid on your investment during this period. In addition, there are fees and expenses imposed under the variable annuity or variable life insurance contract through which shares of the Portfolio are held. Additional fees have the effect of reducing investment returns.

# **Hypothetical Example for Comparison Purposes**

The second section in the following table provides information about hypothetical investment values and hypothetical expenses for each share class based on the Portfolio's actual expense ratio and an assumed rate of return of five percent per year before expenses, which is not the Portfolio's actual return. The hypothetical investment values and expenses may not be used to estimate the actual investment value at the end of the period or expenses you paid for the period. You may use this information to compare the ongoing costs of investing in the Portfolio and other funds. To do so, compare this five percent hypothetical example with the five percent hypothetical examples that appear in the shareholder reports of the other funds.

Please note that the expenses shown in the table are meant to highlight your ongoing costs as a shareholder of the Portfolio and do not reflect any fees and expenses imposed under the variable annuity or variable life insurance contract through which shares of the Portfolio are held.

Expenses paid may be impacted by expense reduction arrangements. If those arrangements had not been in place, expenses paid would have been higher. See Note 6 in Notes to Financial Statements for further information.

	Beginning Account Value 6-30-19	Ending Account Value	Expenses	Beginning	Ending		Annualized
Portfolio		12-31-19	Paid During Period*	Account Value 6-30-19	Account Value 12-31-19	Expenses Paid During Period*	Expense Ratio Based on the Six-Month Period
Asset Strategy							
Class I	\$1,000	\$1,062.00	\$4.02	\$1,000	\$ 1,021.34	\$3.94	0.77%
Class II	\$1,000	\$1,060.60	\$5.25	\$1,000	\$1,020.08	\$ 5.15	1.02%
Balanced							
Class II	\$1,000	\$1,083.70	\$ 5.31	\$1,000	\$ 1,020.14	\$ 5.15	1.01%
Energy							
Class I	\$1,000	\$ 947.80	\$4.87	\$1,000	\$ 1,020.16	\$5.05	1.00%
Class II	\$1,000	\$ 946.60	\$ 6.13	\$1,000	\$ 1,018.94	\$6.36	1.25%
Growth							
Class II	\$1,000	\$1,102.20	\$5.26	\$1,000	\$1,020.18	\$5.05	1.00%
High Income							
Class I	\$1,000	\$1,027.50	\$3.45	\$1,000	\$ 1,021.85	\$3.44	0.67%
Class II	\$1,000	\$1,025.90	\$4.66	\$1,000	\$1,020.57	\$4.65	0.92%
International Core Equity							
Class II	\$1,000	\$1,060.10	\$5.97	\$1,000	\$ 1,019.38	\$5.86	1.16%
Mid Cap Growth							
Class I	\$1,000	\$1,087.70	\$4.49	\$1,000	\$1,020.92	\$4.34	0.85%
Class II	\$1,000	\$1,086.30	\$5.74	\$1,000	\$ 1,019.66	\$5.55	1.10%
Natural Resources							
Class II	\$1,000	\$ 997.10	\$ 6.19	\$1,000	\$1,019.05	\$6.26	1.22%
Science and Technology							
Class I	\$1,000	\$ 1,127.50	\$4.79	\$1,000	\$1,020.69	\$4.55	0.90%
Class II	\$1,000	\$ 1,126.10	\$ 6.17	\$1,000	\$ 1,019.41	\$5.86	1.15%
Small Cap Core							
Class II	\$1,000	\$1,037.60	\$ 6.01	\$1,000	\$ 1,019.30	\$5.96	1.17%
Small Cap Growth							
Class I	\$1,000	\$1,003.60	\$ 4.51	\$1,000	\$ 1,020.71	\$4.55	0.89%
Class II	\$1,000	\$1,002.30	\$ 5.81	\$1,000	\$ 1,019.45	\$5.86	1.14%

<sup>\*</sup>Portfolio expenses are equal to the Portfolio's annualized expense ratio (provided in the table), multiplied by the average account value over the period, multiplied by 184 days in the six-month period ended December 31, 2019, and divided by 365.

The above illustrations are based on ongoing costs only.

<sup>(1)</sup>This section uses the Portfolio's actual total return and actual Portfolio expenses. It is a guide to the actual expenses paid by the Portfolio in the period. The "Ending Account Value" shown is computed using the Portfolio's actual return and the "Expenses Paid During Period" column shows the dollar amount that would have been paid by an investor who started with \$1,000 in the Portfolio. A shareholder may use the information here, together with the dollar amount invested, to estimate the expenses that were paid over the period. For every thousand dollars a shareholder has invested, the expenses are listed in the last column of this section.

<sup>(2)</sup>This section uses a hypothetical five percent annual return and actual Portfolio expenses. It helps to compare the Portfolio's ongoing costs with other mutual funds. A shareholder can compare the Portfolio's ongoing costs by comparing this hypothetical example with the hypothetical examples that appear in shareholder reports of other



Chace Brundige



W. Jeffery Surles

Below, F. Chace Brundige, CFA, and W. Jeffery Surles, CFA, portfolio managers of Ivy VIP Asset Strategy, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Brundige has managed the Portfolio since 2014 and has 26 years of industry experience. Mr. Surles has managed the Portfolio since 2018 and has 18 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Asset Strategy (Class II shares at net asset value)	21.78%
Benchmark and Morningstar Category	
MSCI All Country World Index (ACWI) (generally reflects the performance of stocks in 46 developed and emerging markets)	26.60%
Morningstar World Allocation Category Average (generally reflects the performance of the universe of funds with similar investment objectives)	16.10%

Please note that the Portfolio returns include applicable investment fees and expense, whereas the index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

# An interesting year

According to Morgan Stanley, 2019 is the first year since 2010 in which every major asset class performed better than inflation. The starting point is important, of course, since 2018 was unique in that every major asset class underperformed inflation. The MSCI ACWI, the Portfolio's benchmark, returned 26.6% for the year. It did not recover to its September 2018 high until July, then consolidated until it pierced that level for good in October as the trade picture began to clear with positive indications of an initial trade agreement between the U.S. and China.

Yield curves began the year at their respective peaks, with all major curves flattening or shifting down through the first three quarters. The Federal Reserve (Fed), which raised interest rates nine times between late 2015 and December 2018, finally took its cue from markets and cut rates at each of its July, September, and October 2019 meetings. With central bank support firmly in place and the trade picture clearing, equity markets rallied and yield curves steepened during the fourth quarter. High yield credit spreads performed roughly in line with equities — rallying from recent peaks during the first quarter, volatile during the middle of the year and rallying to new low spread levels for the year in December, though still above the lows of both 2018 and 2017.

In addition to the improving trade picture with China during the year, the modification to the North American Free Trade Agreement known as the U.S.-Mexico-Canada Agreement was passed by the U.S. House of Representatives and we think it is likely to become law upon Senate approval. While it's difficult to measure the full negative impact of the trade dispute, it's fairly clear that global trade has slowed and corporate capital expenditures have come under pressure because of the uncertainty. Despite the uptick with "Phase 1" of a trade agreement that is expected to be signed in early 2020, any potential rebound in those two key metrics also will be difficult to gauge. That said, global manufacturing data appears to have bottomed for now, with positive signals stemming from inventory and new order data. Central banks remain accommodative and many national governments appear to be following the U.S., which in late 2019 posted a budget deficit eclipsing \$1 trillion.

There were many macro and political events that affected the markets during the year: Brexit uncertainties, trade wars, Hong Kong unrest, Middle East tensions, spats with North Korea and impeachment proceedings, to name a few examples. All largely were brushed off by the markets. The focus — rightly so in our opinion — continues to be more on monetary policy, which remains easy, and economic growth, which we believe remains at acceptable levels.

#### Solid performance, but we could not keep pace with global equity markets

The Portfolio had a positive return for the fiscal year but did not keep pace with its benchmark. However, the Portfolio outperformed its Morningstar category average return.

The equity sleeve of the Portfolio performed well, with relative strength in information technology and industrials offsetting weakness in consumer discretionary and health care. Strong returns from Taiwan Semiconductor Manufacturing Co. Ltd., Qualcomm, Inc., ASML Holding N.V., Microsoft Corp. and Fisery, Inc. eclipsed the fact that the Portfolio did not

hold Apple, Inc. — a major component of the benchmark and key contributor to its performance — for most of the year. The Portfolio's industrial sector holdings performance was led by aerospace and defense, with Airbus SE — the largest position in the sector — rallying 55% for the year. Other industrial contributors include Ferguson Plc in the U.K., Vinci in France, and railroads Union Pacific Corp. and Kansas City Southern.

Weakness in the consumer discretionary sector performance was led by two positions within Japanese autos — Suzuki Motor Corp. and Subaru Corp. The former has been driven by a downturn in demand from India via its majority owned Maruti Suzuki subsidiary. We were a bit late to purchase Subaru, and the stock consolidated after a period of outperformance. In both cases, we feel the market has mispriced the respective opportunities in India and North America, and we continue to add on weakness. Dollar Tree, Inc., has also performed poorly since our purchase, though we maintain conviction in the longer term potential opportunity.

Health care performance was hindered by a large weight in Pfizer, which fell during the year after strong performance in 2018, and a poorly timed exit from UnitedHealth Group. We sold Pfizer during the year and built a position in Anthem within managed care, which trades at a steep discount to UnitedHealth Group.

Performance of the fixed income component of the Portfolio had a double-digit return on a standalone basis during the year. While a solid performance in isolation, it still was a detractor to overall performance against the Portfolio's all-equity benchmark. A longstanding position in subordinated European bank debt continued to perform well. Near the end of the fiscal year, we slightly reduced the position as a number of bonds hit price targets. Another longstanding position that contributed to performance was Altice Luxembourg S.A., in which we own bonds at several different points in the capital structure. Management demonstrated its ability to de-leverage the company through a series of asset sales which caused the bonds to rally substantially. Again, we reduced the position near the end of the year as bonds started to hit price targets and grew less attractive on a relative value basis. We had one substantial credit event during the year related to Argentina, where the Portfolio owns both sovereign and provincial credit. We were caught when the election cycle returned a Peronist government to power, causing bond prices to drop precipitously. We still have the exposure in the Portfolio as we believe the bonds are now trading significantly below recovery value in the event of any restructuring.

Gold consolidated early in the year but picked up steam as global rates came under pressure until Fed easing took hold. The metal continues to hold a place in our portfolio as one of the least-correlated to equities over time, though position size may vary with circumstances.

Investments in derivatives had a small positive impact on performance for the fiscal year.

#### Outlook for 2020

We enter 2020 with an equity weight of around 66%, with more than 25% in fixed income, almost 6% in gold and expected portfolio volatility of 74% of the benchmarks. Over the last few months, we continued to trim positions as they approached our targets, redeploying that capital in what we believe are attractive areas of global equity and fixed income.

For the first time in a long time, the Portfolio's equity exposure is primarily outside the U.S., where strong relative performance has, in many cases, led to less appealing relative value. We have found opportunities in autos in Japan, oil exploration & production in Canada, and semiconductors and financials in Asia, among others. In fixed income, we have decreased the previously outsized exposure to European bank subordinated debt and are primarily looking to redeploy capital into bifurcated parts of the high yield markets, where the relative spreads between BB-rated credit and lower-rated segments of the market are at historically wide levels.

We remain comfortable with the gold position because of its strong performance in 2019. Many countries and their respective central banks are beginning to question the ability of monetary policy alone to drive economic growth, given slower population growth, rising dependency ratios, high and rising corporate debt, and a decline in China's appetite for basic materials.

The call for fiscal stimulus is strong and growing globally, buttressed by the growing acceptance of "Modern Monetary Theory," which generally rejects conventional beliefs about government spending, money, taxes and budget deficits. We think it may just work...until it doesn't. To the extent that deficits do matter, we think the gold market will sniff that out even as real interest rates begin to rise to send the warning — and what would central banks do then?

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

The Portfolio may allocate its assets among different asset classes of varying correlation around the globe.

International investing involves additional risks, including currency fluctuations, political or economic conditions affecting the foreign country, and differences in accounting standards and foreign regulations. These risks are magnified in emerging markets.

Fixed-income securities are subject to interest-rate risk and, as such, the net asset value of the Portfolio may fall as interest rates rise. Investing in high-income securities may carry a greater risk of nonpayment of interest or principal than higher-rated bonds.

The Portfolio may seek to hedge market risk via the use of derivative instruments. Such investments involve additional risks.

Investing in commodities is generally considered speculative because of the significant potential for investment loss. Markets for commodities are likely to be volatile and there may be sharp price fluctuations even during periods when prices overall are rising.

The use of derivatives presents several risks, including the risk that these instruments may change in value in a manner that adversely affects the Portfolio's value and the risk that fluctuations in the value of the derivatives may not correlate with the corresponding securities or fixed income markets or the underlying asset upon which the derivative's value is based.

These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and include reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Asset Strategy.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

# **Asset Allocation**

Stocks	66.2%
Information Technology	17.3%
Industrials	11.9%
Financials	9.3%
Consumer Discretionary	7.1%
Health Care	7.1%
Consumer Staples	6.6%
Energy	3.8%
Communication Services	1.1%
Utilities	1.0%
Materials	0.7%
Real Estate	0.3%
Bullion (Gold)	5.7%
Bonds	25.1%
Corporate Debt Securities	13.7%
Loans	5.1%
United States Government and Government Agency	
Obligations	4.3%
Mortgage-Backed Securities	1.0%
Other Government Securities	1.0%
Cash and Other Assets (Net of Liabilities),	
and Cash Equivalents+	3.0%

# **Country Weightings**

North America	46.6%
United States	44.8%
Other North America	1.8%
Europe	28.4%
France	7.9%
United Kingdom	7.1%
Switzerland	4.5%
Other Europe	8.9%
Pacific Basin	15.0%
Japan	5.5%
Other Pacific Basin	9.5%
South America	1.3%
Bullion (Gold)	5.7%
Cash and Other Assets (Net of Liabilities),	2.00/
and Cash Equivalents+	3.0%

# **Top 10 Equity Holdings**

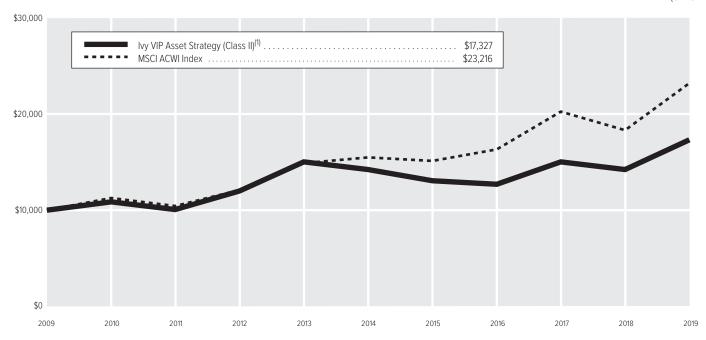
Company	Country	Sector	Industry
Microsoft Corp.	United States	Information Technology	Systems Software
Taiwan Semiconductor Manufacturing Co. Ltd.	Taiwan	Information Technology	Semiconductors
Fiserv, Inc.	United States	Information Technology	Data Processing & Outsourced Services
Wal-Mart Stores, Inc.	United States	Consumer Staples	Hypermarkets & Super Centers
Airbus SE	France	Industrials	Aerospace & Defense
Visa, Inc., Class A	United States	Information Technology	Data Processing & Outsourced Services
ORIX Corp.	Japan	Financials	Consumer Finance
Nestle S.A., Registered Shares	Switzerland	Consumer Staples	Packaged Foods & Meats
Adobe, Inc.	United States	Information Technology	Application Software
Ping An Insurance (Group) Co. of China Ltd., H Shares	China	Financials	Life & Health Insurance

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# **COMPARISON OF CHANGE IN VALUE OF \$10,000 INVESTMENT** ASSET STRATEGY

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class I	Class II
1-year period ended 12-31-19	22.08%	21.78%
5-year period ended 12-31-19	_	3.99%
10-year period ended 12-31-19	_	5.65%
Since Inception of Class through 12-31-19 <sup>(3)</sup>	9.87%	_

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

(3)4-28-17 (the date on which shares were first acquired by shareholders).

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Interactive Media & Services – 1.1% Facebook, Inc., Class A (A)	41	\$ 8,505
Total Communication Services – 1.1%		8,505
Consumer Discretionary		
Auto Parts & Equipment – 1.1%  Aptiv plc	85	8,076
Automobile Manufacturers – 2.1% Subaru Corp. (B)	274 222	6,767 9,244 ———————————————————————————————————
General Merchandise Stores – 0.8% Dollar Tree, Inc. (A)	69	6,524
Home Improvement Retail – 1.0% Home Depot, Inc. (The)	36	7,915
Internet & Direct Marketing Retail – 1. Amazon.com, Inc. (A)	.0%	7,861
Leisure Facilities — 0.0% COTA Racing & Entertainment LLC, Class B (A)	_*	
Leisure Products – 0.1%  Media Group Holdings LLC,  Series H (A)(C)(D)(E)	32	_*
Media Group Holdings LLC, Series T (A)(C)(D)(E)	4	395 395
Restaurants – 1.0% Compass Group plc (B)	309	7,748
Total Consumer Discretionary – 7.1%		54,530
Consumer Staples		
Household Products – 1.0% Procter & Gamble Co. (The)	63	7,865
Hypermarkets & Super Centers – 2.19 Wal-Mart Stores, Inc.	% 135	16,043
Packaged Foods & Meats – 2.5% Danone S.A. (B)	95 107	7,893 11,572 19,465
Personal Products – 1.0% Beiersdorf Aktiengesellschaft (B)	66	7,850
Total Consumer Staples – 6.6%		51,223

COMMON STOCKS (Continued)	Shares	Value
Energy		
Integrated Oil & Gas – 1.0%		
Total S.A. (B)	146	\$ 8,031
Oil & Gas Exploration & Production — 0	.9%	
Canadian Natural Resources Ltd	212	6,852
Oil & Gas Refining & Marketing – 1.1%		
Reliance Industries Ltd. (B)	404	8,568
Oil & Gas Storage & Transportation — ( Enterprise Products Partners L.P		5,912
Total Energy – 3.8%		29,363
Financials		
Consumer Finance – 1.7%		
ORIX Corp. (B)	795	13,141
Diversified Banks – 3.8%		
BNP Paribas S.A. (B)	146	8,657
ICICI Bank Ltd. (B)	1,020	7,704
Financial Group (B)	1,314	7,103
UniCredit S.p.A. (B)	414	6,042
		29,506
Life & Health Insurance – 2.6%		
AIA Group Ltd. (B)	874	9,173
Ping An Insurance (Group) Co. of China Ltd., H Shares (B)	902	10,666
		19,839
Other Diversified Financial Services — Citigroup, Inc.	1.2% 120	9,558
Total Financials – 9.3%		72,044
Health Care		,-
Biotechnology – 0.7%		
Sarepta Therapeutics, Inc. (A)(F)	39	5,057
Health Care Equipment – 1.3%		
Zimmer Holdings, Inc	64	9,581
Life Sciences Tools & Services – 0.3%		
Qiagen N.V. (A)	71	2,400
Managod Hoalth Caro 0.00/		
Managed Health Care – 0.8% Anthem, Inc.	21	6,427
Pharmaceuticals – 4.0%		
AstraZeneca plc (B)	76	7,708
Elanco Animal Health, Inc. (A)	299	8,808
GlaxoSmithKline plc (B)	338	7,976
Merck KGaA (B)	60	7,068
	00	
		31,560
Total Health Care – 7.1%		55,025

COMMON STOCKS (Continued) Industrials Aerospace & Defense – 3.0% Airbus SE (B)	Shares	Value
Aerospace & Defense – 3.0% Airbus SE (B)	01	
Airbus SE (B)	01	
Troranop Gramman Gorp		\$ 13,386 9,922
	. 20	23,308
Construction & Engineering — 1.8% Larsen & Toubro Ltd. (B) Vinci (B)		6,326 7,811
		14,137
Construction Machinery & Heavy Truc Caterpillar, Inc.		8,703
Electrical Components & Equipment - Schneider Electric S.A. (B)		9,691
Industrial Conglomerates – 0.9% Koninklijke Philips Electronics N.V., Ordinary Shares (B)	. 140	6,820
Industrial Machinery – 0.9% Gardner Denver Holdings, Inc. (A)		6,637
Railroads — 2.0% Kansas City Southern Union Pacific Corp.		6,166 9,405 15,571
Trading Companies & Distributors – C Ferguson plc (B)		7,368
Total Industrials – 11.9%		92,235
Information Technology		
Application Software – 2.6% Adobe, Inc. (A)		11,234 9,266 20,500
Data Processing & Outsourced Servic Fiserv, Inc. (A) Visa, Inc., Class A		18,950 13,278 32,228
Electronic Equipment & Instruments – Keyence Corp. (B)		6,473
Internet Services & Infrastructure – 0. VeriSign, Inc. (A)		2,030
IT Consulting & Other Services – 0.2% Garter, Inc., Class A (A)		1,874

COMMON STOCKS (Continued) Sha	res	Value
Semiconductors – 4.1% QUALCOMM, Inc.	97	\$ 8,548
Taiwan Semiconductor Manufacturing Co. Ltd. (B) 2,0	)86	23,033
		31,581
Systems Software – 3.0% Microsoft Corp.	146	23,083
Technology Hardware, Storage & Peripho Samsung Electronics Co. Ltd. (B)	erals 160	- 1.0% - 7,656
Total Information Technology – 17.3%		134,162
Materials		
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	773	5,527
Total Materials – 0.7%		5,527
Real Estate		
Specialized REITs – 0.3% Equinix, Inc.	4	2,130
Total Real Estate – 0.3%		2,130
Utilities		
Electric Utilities – 1.0% E.ON AG (B)	744	7,918
Total Utilities – 1.0%		7,918
TOTAL COMMON STOCKS – 66.2%		\$512,662
(Cost: \$445,158)		\$512,002
CORPORATE DEBT SECURITIES Princ	ipal	
Communication Services		
Cable & Satellite - 0.7% Altice Luxembourg S.A.,		
10.500%, 5-15-27 (G) \$2,3 Altice S.A.,	383	2,717
7.625%, 2-15-25 (G) 2,6	603	2,707
		5,424
Integrated Telecommunication Services – 1.1%		
Frontier Communications Corp.: 7.625%, 4-15-24 2,	119	1,022
	323	3,066
	088	2,755
9.000%, 8-15-31 2, West Corp.,	119	1,028
• •	00	1,200
		9,071
Total Communication Services – 1.8%		14,495

(Continued)	Principal	Value
Consumer Discretionary		
Leisure Facilities – 0.3% Circuit of the Americas LLC, Series D, 0.000%, 10-2-23 (H)	\$3,642	\$ 2,261
Total Consumer Discretionary – 0.3%		2,261
Consumer Staples		
Packaged Foods & Meats – 0.3% JBS Investments II GmbH (GTD by JBS S.A.), 7.000%, 1-15-26 (G)	2,088	2,271
Tobacco — 0.3% Altria Group, Inc. (GTD by Philip Morris USA, Inc.), 5.950%, 2-14-49	2,000	2,418
Total Consumer Staples – 0.6%		4,689
Energy		
Integrated Oil & Gas – 0.9%		
Petroleos Mexicanos: 6.490%, 1-23-27 (G)	4,223 2,057	4,491 2,193 6,684
6.490%, 1-23-27 (G)		2,193
6.490%, 1-23-27 (G) 6.840%, 1-23-30 (G)  Total Energy – 0.9%  Financials  Diversified Banks – 4.9%  Barclays plc: 7.875%, 12-29-49 8.000%, 9-15-68  ING Groep N.V., 6.875%, 12-29-49  Royal Bank of Scotland Group plc	7,618	2,193 6,684 6,684 8,208 2,252
6.490%, 1-23-27 (G) 6.840%, 1-23-30 (G)  Total Energy — 0.9%  Financials  Diversified Banks — 4.9%  Barclays plc: 7.875%, 12-29-49 8.000%, 9-15-68  ING Groep N.V., 6.875%, 12-29-49  Royal Bank of Scotland Group plc (The), 8.625%, 12-29-49	7,618 2,013	2,193 6,684 6,684 8,208 2,252 2,866
6.490%, 1-23-27 (G) 6.840%, 1-23-30 (G)  Total Energy — 0.9%  Financials  Diversified Banks — 4.9%  Barclays plc: 7.875%, 12-29-49 8.000%, 9-15-68  ING Groep N.V., 6.875%, 12-29-49  Royal Bank of Scotland Group plc (The), 8.625%, 12-29-49  Societe Generale Group, 7.375%, 12-29-49 (G)	2,057 7,618 2,013 2,681	2,193 6,684 6,684 8,208 2,252 2,866
6.490%, 1-23-27 (G) 6.840%, 1-23-30 (G)  Total Energy — 0.9%  Financials  Diversified Banks — 4.9%  Barclays plc: 7.875%, 12-29-49 8.000%, 9-15-68  ING Groep N.V., 6.875%, 12-29-49  Royal Bank of Scotland Group plc (The), 8.625%, 12-29-49  Societe Generale Group,	7,618 2,013 2,681 8,153	2,193 6,684 6,684 8,208 2,252 2,866 8,816 6,066
6.490%, 1-23-27 (G) 6.840%, 1-23-30 (G)  Total Energy — 0.9%  Financials  Diversified Banks — 4.9%  Barclays plc: 7.875%, 12-29-49 8.000%, 9-15-68 ING Groep N.V., 6.875%, 12-29-49  Royal Bank of Scotland Group plc (The), 8.625%, 12-29-49  Societe Generale Group, 7.375%, 12-29-49 (G)  Standard Chartered plc, 7.500%, 12-29-49 (G)	7,618 2,013 2,681 8,153 5,723	2,193 6,684 6,684 8,208
6.490%, 1-23-27 (G) 6.840%, 1-23-30 (G)  Total Energy — 0.9%  Financials  Diversified Banks — 4.9%  Barclays plc: 7.875%, 12-29-49 8.000%, 9-15-68 ING Groep N.V., 6.875%, 12-29-49 Royal Bank of Scotland Group plc (The), 8.625%, 12-29-49 Societe Generale Group, 7.375%, 12-29-49 (G)  Standard Chartered plc, 7.500%, 12-29-49 (G)  UniCredit S.p.A.: 5.861%, 6-19-32 (G)	2,057  7,618 2,013 2,681  8,153 5,723 3,731 3,700	2,193 6,684 6,684 8,208 2,252 2,866 8,816 6,066 4,016 3,861 1,852

CORPORATE DEBT SECURITIES (Continued)	Principal	١	/alue
Investment Banking & Brokerage – ( Goldman Sachs Group, Inc. (The) (3-Month U.S. LIBOR plus 117 bps),	0.4%		
3.080%, 5-15-26 (I)	\$ 3,241	\$	3,275
Total Financials – 6.6%			50,970
Health Care			
Pharmaceuticals – 0.3% Teva Pharmaceutical Finance Netherlands III B.V. (GTD by Teva Pharmaceutical Industries Ltd.), 2.800%, 7-21-23	2,034		1,887
Total Health Care – 0.3%			1 00
Industrials			1,887
Aerospace & Defense – 0.9%			
Wolverine Escrow LLC: 8.500%, 11-15-24 (G) 9.000%, 11-15-26 (G) 13.125%, 11-15-27 (G)	2,080 2,081 2,081		2,153 2,180 2,138
			6,47
Industrial Conglomerates – 0.3%			
Cosan Ltd., 5.500%, 9-20-29 (G)	2,330	_	2,429
Railroads — 0.2% Rumo Luxembourg S.a.r.l., 7.375%, 2-9-24 (G)	1,362	_	1,467
Security & Alarm Services – 0.7% Prime Security Services Borrower LLC and Prime Finance, Inc., 9.250%, 5-15-23 (G)	5,084		5.332
6.266.8, 6.16.26 (6)	0,001	_	0,002
Total Industrials – 2.1%			15,699
Information Technology			
IT Consulting & Other Services – 0.4 Atento Luxco 1 S.A.,	%		
6.125%, 8-10-22 (G)	3,201	_	3,153
Total Information Technology – 0.49	6		3,153
Materials			
Diversified Metals & Mining – 0.7% Glencore Funding LLC: 4.125%, 3-12-24 (G)	2,415 2,732		2,527 2,965
		_	5,492
Total Materials – 0.7%			5,492
TOTAL CORPORATE DEBT			
SECURITIES – 13.7%		\$1	05,330

(Cost: \$103,727)

MORTGAGE-BACKED SECURITIES	Principal	Value
Non-Agency REMIC/CMO – 1.0%		
Ellington Financial Mortgage Trust, Series 2018-1, Class B1 (Mortgage		
spread to 10-year U.S. Treasury		
index),		
5.574%, 10-25-58 (G)(I)	\$1,500	\$ 1,504
Homeward Opportunities Fund I Trust, Series 2019-1, Class B1		
(Mortgage spread to 10-year U.S.		
Treasury index),		
4.800%, 1-25-59 (G)(I)	1,061	1,073
Merrill Lynch Mortgage Investors Trust, Series 1998-C1, Class F,	4.000	4040
6.250%, 11-15-26	1,228	1,240
Series 2019-1, Class B1 (Mortgage		
spread to 10-year U.S. Treasury		
index),		
5.311%, 2-25-59 (G)(I)	3,432	3,491
		7,308
TOTAL MODEON OF BARVED		
TOTAL MORTGAGE-BACKED SECURITIES – 1.0%		\$7,308
(Cost: \$7,388)		
OTHER GOVERNMENT SECURITIES (J)		
Argentina – 1.0%		
Province of Mendoza,		
8.375%, 5-19-24	4,362	3,250
Republic of Argentina:		
4.625%, 1-11-23	6,531 2,100	3,223 987
5.675%, I-II-26 (F)	2,100	
		7,460
TOTAL OTHER GOVERNMENT		
SECURITIES – 1.0%		\$7,460
(Cost: \$12,541)		
LOANS (I)		
Communication Services		
Integrated Telecommunication Service West Corp. (3-Month	es – 0.7%	
ICE LIBOR plus 400 bps), 5.927%, 10-10-24	6,093	5,150
Total Communication Services – 0.7%		5,150
Energy		
Oil & Gas Storage & Transportation — EPIC Crude Services L.P. (ICE LIBOR	0.3%	
plus 500 bps),		
7.040%, 3-1-26	2,818	2,698
Total Energy – 0.3%		2,698

LOANS (I) (Continued)	Principal	Value
Financials		
Financial Exchanges & Data – 0.4% Refinitiv U.S. Holdings, Inc.		
(ICE LIBOR plus 375 bps), 5.049%, 10-1-25	\$3,243	\$ 3,271
Property & Casualty Insurance – 1.7% Amynta Agency Borrower, Inc. (ICE LIBOR plus 400 bps),	ó	
6.299%, 2-28-25 (E)	5,310	4,938
4.690%, 4-25-25	522	521
4.945%, 5-16-24	7,285	7,278
		12,737
Total Financials – 2.1%		16,008
Health Care		
Health Care Facilities – 0.6% RegionalCare Hospital Partners Holdings, Inc. (ICE LIBOR plus 450 bps),		
6.202%, 11-16-25	1,998	2,013
5.050%, 8-31-24	2,820	2,803
		4,010
Health Care Services – 0.3%  Heartland Dental LLC, 0.000%, 4-30-25 (K)	58	57
5.549%, 4-30-25	2,561	2,545
Total Health Care – 0.9%		7,418
Information Technology		
Application Software – 0.4% Avaya, Inc. (ICE LIBOR plus 425 bps), 5.990%, 12-15-24	2,853	2,794
Total Information Technology – 0.4%	Ď	2,794
Materials		
Construction Materials — 0.7% Hillman Group, Inc. (The) (ICE LIBOR plus 350 bps), 5.799%, 5-31-25	5,304	5,208
Total Materials – 0.7%	3,001	5,208
Total Materials – 0.7 /6		3,200

Mortgage-Backed Obligations — 0.7% Federal National Mortgage Association Agency REMIC/CMO (1-Month U.S. LIBOR plus 562 bps), 3.828%, 6-25-45 (I)(L) Federal National Mortgage Association Agency REMIC/CMO (1-Month U.S. LIBOR plus 625 bps): 4.328%, 4-25-45 (I)(L) 4.308%, 4-25-46 (I)(L) 4.458%, 6-25-48 (I)(L)		\$ 798
Federal National Mortgage Association Agency REMIC/CMO (1-Month U.S. LIBOR plus 625 bps): 4.328%, 4-25-45 (I)(L) 4.308%, 4-25-46 (I)(L) 4.308%, 8-25-46 (I)(L)	2,152	\$ 750
4.308%, 4-25-46 (I)(L)		
	5,211 11,748	438 803 859 2,248 5,146
TOTAL UNITED STATES GOVERNMENT AGENCY OBLIGATIONS – 0.7%	Г	\$ 5,146
(Cost: \$5,129)		
UNITED STATES GOVERNMENT OBLIG	SATIONS	
Treasury Inflation Protected Obligation U.S. Treasury Notes:	ns – 2.1%	Ď
0.125%, 4-15-21 0.625%, 1-15-26 0.125%, 7-15-26	4,646 5,830 5,797	4,637 6,008 5,815
		16,460
Treasury Obligations – 1.5% U.S. Treasury Bonds: 2.750%, 8-15-47 3.000%, 2-15-49	8,828 2,024	9,456 2,280
		11,736
TOTAL UNITED STATES GOVERNMENT	Г	
OBLIGATIONS – 3.6% (Cost: \$27,042)		\$28,196
(COSt. \$27,042)		
BULLION – 5.7%	Troy Ounces	
Gold	29	44,344
(Cost: \$36,084)		
SHORT-TERM SECURITIES	Shares	
Money Market Funds (N) – 2.7% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares,		
1.550%, (M)	616	616
– Premier Class, 1.550%	19,994	19,994
TOTAL SHORT-TERM SECURITIES – 2.	7%	\$20,610

(Cost: \$20,610)

	Value
TOTAL INVESTMENT SECURITIES – 99.7%	\$770,332
(Cost: \$698,390)	
CASH AND OTHER ASSETS, NET OF LIABILITIES – 0.3%	2,276
NET ASSETS – 100.0%	\$772,608

Notes to Consolidated Schedule of Investments

\*Not shown due to rounding.

(A)No dividends were paid during the preceding 12 months.

(B)Listed on an exchange outside the United States.

(C)Restricted securities. At December 31, 2019, the Portfolio owned the following restricted securities:

Security	Acquisition Date(s)	Shares	Cost	Value
Media Group Holdings LLC, Series H	8-29-13 to 10-31-13	32	\$22,349	\$ -*
Media Group Holdings LLC, Series T	7-2-13 to 1-23-15	4	8,413	395
			\$30,762	\$395

The total value of these securities represented 0.1% of net assets at December 31, 2019.

(D)Investment is owned by an entity that is treated as a corporation for U.S. tax purposes and is owned by the Portfolio and consolidated as described in Note 5 of the Notes to Financial Statements.

(E)Securities whose value was determined using significant unobservable inputs.

(F)All or a portion of securities with an aggregate value of \$5,144 are on loan.

(G)Securities were purchased pursuant to an exemption from registration available under Rule 144A under the Securities Act of 1933 and may only be resold in transactions exempt from registration, normally to qualified institutional buyers. At December 31, 2019 the total value of these securities amounted to \$66,319 or 8.6% of net assets.

(H)Zero coupon bond.

(I)Variable rate security. Interest rate disclosed is that which is in effect at December 31, 2019. Description of the reference rate and spread, if applicable, are included in the security description.

(J)Other Government Securities may include emerging markets sovereign, quasi-sovereign, corporate and supranational agency and organization debt securities.

(K)All or a portion of this position has not settled. Full contract rates do not take effect until settlement date.

(L)Interest-only security. Amount shown as principal represents notional amount for computation of interest.

(M)Investment made with cash collateral received from securities on loan.

(N)Rate shown is the annualized 7-day yield at December 31, 2019

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks			
Communication Services	\$ 8,505	\$ -	\$ -
Consumer Discretionary	38,124	16,011	395
Consumer Staples	31,801	19,422	_
Energy	29,363	_	_
Financials	45,758	26,286	_
Health Care	47,957	7,068	_
Industrials	92,235	_	_
Information Technology	120,033	14,129	_
Materials	5,527	_	_
Real Estate	2,130	_	_
Utilities	_	7,918	_
Total Common Stocks	\$421,433	\$90,834	\$395

	Level 1	Level 2	Level 3
Corporate Debt Securities	\$ -	\$105,330	\$ -
Mortgage-Backed Securities	_	7,308	_
Other Government Securities	_	7,460	_
Loans	_	34,338	4,938
United States Government Agency Obligations	_	5,146	_
United States Government Obligations	_	28,196	_
Bullion	44,344	_	_
Short-Term Securities	20,610	_	
Total	\$486,387	\$278,612	\$5,333

During the year ended December 31, 2019, securities totaling \$3,417 were transferred from Level 2 to Level 3 due to the lack of observable market data due to decreased market activity or information for these securities.

The following acronyms are used throughout this schedule:

CMO = Collateralized Mortgage Obligation

GTD = Guaranteed

ICE = Intercontinental Exchange

LIBOR = London Interbank Offered Rate

REIT = Real Estate Investment Trust

REMIC = Real Estate Mortgage Investment Conduit

# **Country Diversification**

#### (as a % of net assets) **United States** 44.8% 7.9% France United Kingdom 7.1% 5.5% Japan Switzerland 4.5% Taiwan 3.0% Germany 2.9% 2.9% Netherlands

# **Country Diversification** (Continued)

India	2.9%
Italy	1.5%
China	1.4%
Luxembourg	1.3%
Hong Kong	1.2%
South Korea	1.0%
Argentina	1.0%
Other Countries	2.4%
Other+	8.7%

<sup>+</sup>Includes gold bullion, cash and other assets (net of liabilities), and cash equivalents



Matthew A. Hekman



Mark G. Beischel



Susan Regan

# Below, Matthew A. Hekman, Mark G. Beischel, CFA, and Susan K. Regan, the co-portfolio managers of Ivy VIP Balanced, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Hekman has managed the Portfolio since 2014, and has 21 years of industry experience. Mr. Beischel and Ms. Regan joined Mr. Hekman as co-portfolio managers of the Fund in April 2018. Mr. Beischel has 26 years of industry experience. Ms. Regan has 32 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Balanced (Class II shares at net asset value)	22.09%
Benchmark and Morningstar Category	
S&P 500 Index (Generally reflects the performance of large- and medium-sized U.S. stocks)	31.49%
Bloomberg Barclays U.S. Government/Credit Index (Generally reflects the performance of securities in the bond market)	9.71%
Morningstar Allocation 50% to 70% Equity Category Average (Generally reflects the performance of the universe of portfolios with similar investment objectives)	19.23%

Please note that Portfolio returns include applicable fees and expenses while index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in lvy Variable Insurance Portfolios.

# **Key Drivers**

The fiscal year that ended December 31, 2019 was rewarding for investors. Equity markets posted positive returns with the S&P 500 Index, the Portfolio's equity benchmark, advancing 31.5% for the year. It is important to note the context of the benchmark's performance in 2019. This followed a weak fourth quarter 2018 that was punctuated by a dramatic 9% decline in December, which had the ignoble distinction of being the worst performance for the final month of a calendar year since 1931.

However, even against that backdrop, the vigorous advance of domestic equity markets was encouraging. Within the S&P 500 Index, the information technology, communication services and financials sectors outperformed the benchmark average while the energy, materials and traditionally defensive sectors of health care, utilities and consumer staples sectors underperformed. As this year marks the end of a decade, it seems appropriate to highlight the index's 11.2% annualized price return over the 10-year period ending December 31, 2019. This performance makes the most recent decade the fourthmost rewarding 10-year period on an annualized price returns basis since 1930; bested only by the 1950s (13.6% annualized price return), the 1980s (12.6%) and the 1990s (15.3%).

As many investors have experienced, the most recent decade has not been without drama and volatility. These periodic bouts of volatility can be unnerving, but the trailing fiscal year and 10-year performance of the Portfolio is a profitable reminder of the value of patient, disciplined investing with a long-term perspective.

Fixed income markets also posted positive returns for the fiscal year with the Bloomberg Barclays U.S. Government / Credit Index, the Portfolio's fixed income benchmark, up 9.71% for the year. Within the fixed income market, the U.S. Treasury yield curve flattened, benefiting longer duration positioning. Short-term Treasury yields declined as the U.S. Federal Reserve (Fed) cut the federal funds rate by a total of 75 basis points during the year, while longer-dated Treasury yields declined due to moderating growth expectations, modest inflation rates and global demand for the relatively attractive yield of U.S. Treasuries.

Investment grade credit reversed its abysmal 2018 performance and generated an excess return of 6.2% versus Treasuries across the maturity spectrum of the fixed income benchmark. During the fiscal year, we continued adjusting the allocation

of the fixed income portfolio to reduce exposure to credit risk. We reduced our credit allocation of the fixed income portion of the Portfolio from 44% at the start of the year to 31% at year's end. Over the same period, we increased our allocation to U.S. Treasuries from 48% to 63%. The Portfolio's duration at year end was 106% of the benchmark.

#### **Contributors and detractors**

The Portfolio advanced just over 22% for the fiscal year, outperforming its peers in the Morningstar moderate allocation category. Performance was driven by a modest overweight of equities relative to the blended benchmark and strong security selection in both the equity and fixed income sleeves. The Portfolio's equity exposure averaged about 63% for the year; with 36% on average invested in fixed income securities and the balance in cash.

The equity component of the Portfolio rose 32.2% for the year, outperforming the S&P 500 Index. Strong stock selection in the financials, materials, consumer staples and information technology sectors were the notable highlights. The fixed income component of the Portfolio was up 9.9% for the year, modestly outperforming its corresponding benchmark. Our long-duration position relative to the benchmark and strong security selection in the industrial, energy and information technology sectors positively impacted relative performance.

Top contributors to over-all product performance included Apple, Inc., Blackstone Group, Inc., Qualcomm, Inc., Microsoft Corporation and Autodesk, Inc. Apple, Inc. had a remarkable year as investors re-valued its equity in recognition of the strength of the brand and in growing anticipation of an iPhone refresh cycle in 2020. Blackstone Group, Inc. also experienced a re-rating of its equity as it converted to a C-Corporation legal structure, which broadened its shareholder base and brought attention to its exceptional growth.

Qualcomm, Inc. posted strong returns as it settled legal disputes with its largest customers and benefited from its technology lead in next-generation 5G Wireless chipsets. Microsoft Corporation continues to expand its capability and market share in the cloud with its Azure product. Its deep focus and expertise in serving corporate information technology departments has strengthened a competitive moat we believe will prove durable. In addition, Autodesk, Inc. continues to execute a successful transition in revenue recognition from sale of product to recurring subscription fees coupled with strong demand for the companies' products which we believe could accelerate in the coming year.

Detractors to performance in the fiscal year were Tapestry, Inc., Cimarex Energy Co., Core Laboratories N.V., Biogen, Inc. and Arista Networks, Inc. Tapestry, Inc. was a disappointing investment for the Portfolio that performed poorly as investor concern over the health of the Coach and Kate Spade brands has proven to be accurate. We elected to exit our position in Tapestry, Inc. and Cimarex Energy Co., which were each negatively affected by an oversupplied energy market, which depressed prices of energy commodities and slowed exploration and production activity. We sold our position in Cimarex Energy Co. and reduced our exposure to Core Laboratories N.V. as we look to emphasize business models that can profitably survive a protracted cyclical downturn in the energy space.

Biogen, Inc. had a perplexing year as its late-stage research program on a drug to treat Alzheimer's disease was terminated due to futility. As a result, we exited the position as the risk/reward was unfavorable in our view at that point. In addition, Arista Networks, Inc. was a recent addition to the equity portion of the Portfolio, which declined in value as a key customer dramatically reduced its demand for Arista's products. Due to substantial negative earnings revisions, turnover in the management team and uncertainty around the motivations of the key customer, we elected to exit our position to invest in more attractive opportunities.

#### Outlook

As we look ahead, we think that global economic growth is likely to improve over the next several quarters as central banks have reduced rates in response to slowing growth and trade frictions have eased between the U.S. and China. However, the uncertainties around political and trade policies are likely to linger.

While we believe domestic economic growth will continue, the lagged effects of tariffs and ongoing uncertainty over future trade policy coupled with a volatile presidential election cycle represent a headwind to confidence and the growth outlook. As a result, we are closely watching inflation rates and inflation expectations which have been modest, and must remain so, in order to allow our central bank to respond to slower growth.

We have been encouraged by the Fed's recent accommodative monetary policy and the ongoing strength exhibited by the U.S. consumer. While we continue to monitor macroeconomic forces and trends, we maintain an emphasis on finding high quality, growing companies whose securities are trading at a reasonable valuation with visible catalysts to drive relative outperformance over the next twelve months. This approach has served investors well over time, and our confidence in it has not waned.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Fixed-income securities are subject to interest rate risk and, as such, the net asset value of the Portfolio may fall as interest rates rise. The lower-rated securities in which the Portfolio may invest may carry greater risk of nonpayment of interest or principal then higher-rated bonds. In addition to the risks typically associated with fixed-income securities, loan participations in which the Portfolio may invest carry other risks, including the risk of insolvency of the lending bank or other intermediary. The Portfolio's emphasis on dividend-paying stocks involves the risk that such stocks may fall out of favor with investors and underperform non-dividend paying stocks and the market as a whole over any period of time. In addition, there is no guarantee that the companies in which the Portfolio invests will declare dividends in the future or that dividends, if declared, will remain at current levels or increase over time. The amount of any dividend the company may pay may fluctuate significantly. In addition, the value of dividend-paying common stocks can decline when interest rates rise as fixed-income investments become more attractive to investors. This risk may be greater due to the current period of historically low interest rates.

The Portfolio typically holds a limited number of stocks (generally 45 to 55). As a result, the appreciation or depreciation of any one security held by the Portfolio will have a greater impact on the Portfolio's net asset value than it would if the Portfolio invested in a large number of securities.

The value of a security believed by the Portfolio's managers to be undervalued may never reach what the managers believe to be its full value, or such security's value may decrease. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the Portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The indexes noted are unmanaged and include reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Balanced.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

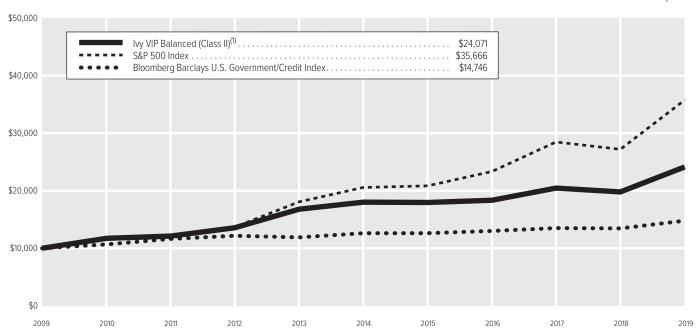
Stocks	67.1%
Information Technology	16.6%
Financials	9.2%
Industrials	8.8%
Communication Services	7.3%
Health Care	7.2%
Consumer Discretionary	6.3%
Energy	4.5%
Consumer Staples	4.1%
Materials	3.1%
Bonds	32.5%
United States Government and Government Agency	
Obligations	21.5%
Corporate Debt Securities	10.7%
Loans	0.3%
Cash and Other Assets (Net of Liabilities), and Cash	
Equivalents+	0.4%

# **Top 10 Equity Holdings**

Company	Sector	Industry
Apple, Inc.	Information Technology	Technology Hardware, Storage & Peripherals
Microsoft Corp.	Information Technology	Systems Software
Autodesk, Inc.	Information Technology	Application Software
Las Vegas Sands, Inc.	Consumer Discretionary	Casinos & Gaming
Union Pacific Corp.	Industrials	Railroads
QUALCOMM, Inc.	Information Technology	Semiconductors
Zimmer Holdings, Inc.	Health Care	Health Care Equipment
Philip Morris International, Inc.	Consumer Staples	Tobacco
Lowe's Co., Inc.	Consumer Discretionary	Home Improvement Retail
JPMorgan Chase & Co.	Financials	Other Diversified Financial Services

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

+Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class II
1-year period ended 12-31-19	22.09%
5-year period ended 12-31-19	6.00%
10-year period ended 12-31-19	9.18%

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Integrated Telecommunication Service Verizon Communications, Inc.	es – 1.1% 59	\$ 3,635
Interactive Home Entertainment – 1.7% Electronic Arts, Inc. (A)		5,723
Interactive Media & Services – 3.8% Alphabet, Inc., Class A (A)	4 1 26	5,897 1,678 5,359 12,934
Movies & Entertainment – 0.7% Walt Disney Co. (The)	17	2,465
Total Communication Services – 7.3%		24,757
Consumer Discretionary		
Apparel, Accessories & Luxury Goods V.F. Corp.	- 1.2% 40	3,989
Casinos & Gaming – 2.0% Las Vegas Sands, Inc	98	6,772
Home Improvement Retail – 1.7% Lowe's Co., Inc.	50	6,025
Restaurants – 1.4% Domino's Pizza, Inc.	16	4,722
Total Consumer Discretionary – 6.3%		21,508
Consumer Staples		
Distillers & Vintners – 1.5% Constellation Brands, Inc.	27	5,122
Packaged Foods & Meats – 0.8% General Mills, Inc.	49	2,616
Tobacco – 1.8% Philip Morris International, Inc	72	6,118
Total Consumer Staples – 4.1%		13,856
Energy		
Integrated Oil & Gas – 2.0% Chevron Corp	28 52	3,430 3,465 6,895
Oil & Gas Equipment & Services – 0.29 Core Laboratories N.V.	6 18	687
Oil & Gas Exploration & Production — 1. Canadian Natural Resources Ltd	.2% 128	4,153

COMMON STOCKS (Continued)	Shares	Value
Oil & Gas Storage & Transportation – 1 Enterprise Products Partners L.P		\$ 3,878
Total Energy – 4.5%		15,613
Financials		
Asset Management & Custody Banks - Blackstone Group, Inc. (The),		
Class A	26	1,439
Diversified Banks – 2.5%	42	4 57
Northern Trust Corp	43 63	4,572 3,737
0.5. Bancorp	05	8,309
Investment Danking & Drakerage 1.5	0/	
Investment Banking & Brokerage – 1.5 Goldman Sachs Group, Inc. (The)		5,182
Multi-Sector Holdings – 1.4%		
Berkshire Hathaway, Inc., Class B (A)	21	4,762
, ,		
Other Diversified Financial Services – JPMorgan Chase & Co	1.7% 43	6,014
Regional Banks – 1.7% PNC Financial Services Group, Inc. (The)	36	5,789
Total Financials – 9.2%		31,495
Health Care		
Health Care Equipment – 1.9% Zimmer Holdings, Inc.	44	6,583
Health Care Technology – 1.4% Cerner Corp.	64	4,694
Managed Health Care — 1.3% Anthem, Inc	15	4,513
Pharmaceuticals – 2.6%		
GlaxoSmithKline plc ADR	100	4,68
Jazz Pharmaceuticals plc (A)	15	2,258
Pfizer, Inc.	45	1,754
		8,699
Total Health Care – 7.2%		24,489
Industrials		
Aerospace & Defense – 1.4% Boeing Co. (The)	15	4,892
Agricultural & Farm Machinery — 1.3% Deere & Co.	25	4,318
Airlines – 1.0%		
Delta Air Lines, Inc.	61	3,566

COMMON STOCKS (Continued)			
	Shares	Vá	alue
Electrical Components & Equipment Emerson Electric Co	- 0.8% 34	\$	2,617
Industrial Machinery – 1.0% Snap-on, Inc.	20		3,443
Railroads – 2.0% Union Pacific Corp.	37		6,746
Trucking – 1.3% Knight Transportation, Inc.	123		4,394
Total Industrials – 8.8%		2	9,976
Information Technology			
Application Software – 2.0% Autodesk, Inc. (A)	37		6,873
Communications Equipment – 1.9% Arista Networks, Inc. (A)	3 121		709 5,825 6,534
Data Processing & Outsourced Service Fiserv, Inc. (A)	ces – 1.7° 51		5,872
Electronic Manufacturing Services – IPG Photonics Corp. (A)			3,744
Semiconductors – 5.7% Infineon Technologies AG ADR Intel Corp	176 50 109 76		3,932 2,988 5,846 6,692 9,458
Systems Software – 2.1% Microsoft Corp	44		6,994
Technology Hardware, Storage & Per Apple, Inc.	ripherals 24	- 2.1	1% 7,157
Total Information Technology – 16.69	%	5	6,632
Materials			
Commodity Chemicals – 1.4% LyondellBasell Industries N.V., Class A	49		4,655
Specialty Chemicals – 1.7% PPG Industries, Inc.	43		5,727
Total Materials – 3.1%		1	0,382
TOTAL COMMON STOCKS – 67.1%		\$22	8,708

CORPORATE DEBT SECURITIES F	Principal	Value
Communication Services		
	\$ 450	\$ 514
4.700%, 10-15-48	450	1,068
Total Communication Services – 0.3%		1,068
Consumer Discretionary		
Casinos & Gaming – 0.1% Las Vegas Sands Corp., 3.500%, 8-18-26	350	360
Internet & Direct Marketing Retail – 0.3 Amazon.com, Inc.,	3%	
2.800%, 8-22-24	1,000	1,035
Total Consumer Discretionary – 0.4%		1,395
Consumer Staples		
Hypermarkets & Super Centers – 0.8%		
Walmart, Inc., 4.050%, 6-29-48	2,500	2,953
Total Consumer Staples – 0.8%		2,953
Energy		
Oil & Gas Drilling — 0.8%  Nabors Industries Ltd., Convertible,  0.750%, 1-15-24	3,600	2,683
Oil & Gas Storage & Transportation – 0 Colorado Interstate Gas Co	.6%	
4.150%, 8-15-26 (B)	800	839
Williams Partners L.P., 3.600%, 3-15-22	1,000	1,028
		1,867
Total Energy – 1.4%		4,550
Financials		
Consumer Finance — 0.3% General Motors Financial Co., Inc. (GTD by AmeriCredit Financial Services, Inc.):		
3.450%, 4-10-22 3.700%, 5-9-23	250 150	256 154
Hyundai Capital America, 2.550%, 4-3-20 (B)	500	500
, , , , , , , , , , , , , , , , , , , ,		910
Diversified Banks – 0.4%		
HSBC Holdings plc, 3.400%, 3-8-21 Truist Financial Corp. (3-Month ICE	625	635
LIBOR plus 386 bps),		

(Continued)	Principal	Value
Diversified Banks (Continued)		
U.S. Bancorp, 3.100%, 4-27-26	\$ 400	\$ 416
5.100%, 4-27-20	J 400	J 410
		1,452
Investment Banking & Brokerage – 0 Credit Suisse Group Funding (Guernsey) Ltd.,	.8%	
2.750%, 3-26-20	500	50
2.905%, 7-24-23	2,000	2,035
5.785%, 12-29-49 (C)	66	66
, , ,		2.00
		2,602
Life & Health Insurance — 0.6% Northwestern Mutual Life Insurance Co. (The),		
3.850%, 9-30-47 (B)	1,000	1,05
4.000%, 9-14-77 (B)	1,000	1,056
•		2,10
		2,10
Multi-Line Insurance – 0.1%		
Aon plc (GTD by Aon Corp.),		
2.800%, 3-15-21	500	505
Other Diversified Financial Services -	- 0.7%	
Citigroup, Inc.: 5.950%, 12-29-49	150	154
6.250%, 12-29-49	750	852
JPMorgan Chase & Co.,		
5.300%, 11-1-68	250	252
JPMorgan Chase & Co. (3-Month U.S. LIBOR plus 332 bps),		
5.419%, 1-1-68 (C)	750	75
JPMorgan Chase & Co. (3-Month U.S.		
LIBOR plus 347 bps),		
5.406%, 4-29-49 (C)	194	196
		2,209
Property & Casualty Insurance — 0.1% Berkshire Hathaway Finance Corp. (GTD by Berkshire Hathaway, Inc.),		
2.200%, 3-15-21	200	20
Regional Banks – 0.2% PNC Bank N.A., 3.250%, 6-1-25	600	629
Total Financials – 3.2%		10,61
Health Care		
Biotechnology – 0.3%		
Amgen, Inc.,		
2.125%, 5-1-20	1,000	1,00

CORPORATE DEBT SECURITIES (Continued)	Principal	Value
Health Care Equipment – 0.1% Zimmer Holdings, Inc., 2.700%, 4-1-20	. \$ 350	\$ 350
Health Care Supplies – 0.3% Shire Acquisitions Investments Ireland Designated Activity Co., 2.875%, 9-23-23		1,018
Pharmaceuticals — 0.8% Bristol-Myers Squibb Co., 3.450%, 11-15-27 (B)	500	535
Forest Laboratories, Inc., 5.000%, 12-15-21 (B)		1,315
Johnson & Johnson, 3.400%, 1-15-38		
3.400%, 1-15-36	. 1,000	1,070 2,920
Total Health Care – 1.5%		5,289
Industrials		
Aerospace & Defense – 0.8% L3Harris Technologies, Inc., 4.400%, 6-15-28	. 1,000	1,113
Northrop Grumman Corp., 3.250%, 1-15-28	1,500	1,564
		2,677
Airlines – 0.1% Southwest Airlines Co., 2.650%, 11-5-20		377
Environmental & Facilities Services – Waste Management, Inc. (GTD by Waste Management Holdings,	0.3%	
Inc.), 3.150%, 11-15-27	. 1,000	1,042
Total Industrials – 1.2%		4,096
Information Technology		
Electronic Equipment & Instruments - Keysight Technologies, Inc.,	- 0.2%	
4.600%, 4-6-27	500	554
Technology Hardware, Storage & Per	ripherals –	0.3%
Apple, Inc., 3.200%, 5-11-27	. 1,000	1,054
Total Information Technology – 0.5%		1,608
Materials		
Diversified Metals & Mining – 0.1% Anglo American plc, 4.125%, 4-15-21 (B)	. 500	510
Specialty Chemicals – 0.3%		
Ecolab, Inc., 3.250%, 12-1-27	1,000	1,057
Total Materials – 0.4%		1,567

CORPORATE DEBT SECURITIES (Continued)	Principal	Value
Real Estate		
Specialized REITs – 0.6%  American Tower Corp., 2.250%, 1-15-22  Crown Castle International Corp.: 5.250%, 1-15-23	. 200	\$ 1,203 217
3.100%, 11-15-29	. 600	607
		2,027
Total Real Estate – 0.6%		2,027
Utilities		
Electric Utilities – 0.4% Duke Energy Corp., 3.150%, 8-15-27	. 500	515
Entergy Texas, Inc., 2.550%, 6-1-21	. 300	300
Exelon Corp., 2.450%, 4-15-21	. 400	402
2.10070, 1.10.21	. 100	1,217
		1,217
Total Utilities – 0.4%		1,217
TOTAL CORPORATE DEBT SECURITIES – 10.7%		\$36,385
(Cost: \$35,760)		, ,
LOANS (C)		
Industrials		
Industrial Machinery – 0.3%  Dynacast International LLC (ICE  LIBOR plus 850 bps),	1100	1.027
10.445%, 1-30-23	. 1,100	1,037
Total Industrials – 0.3%		1,037
TOTAL LOANS – 0.3%		\$ 1,037
(Cost: \$1,089)		
UNITED STATES GOVERNMENT AGENCY OBLIGATIONS		
Mortgage-Backed Obligations – 0.9 Federal Home Loan Mortgage Corp.		
Agency REMIC/CMO, 3.000%, 6-15-45	. 730	750
Association Agency REMIC/CMO: 3.500%, 6-25-29		482 780
Federal National Mortgage Association Fixed Rate Pass- Through Certificates:		. 30
6.500%, 10-1-28	. 57	62
6.500%, 2-1-29	. 27	30
7.500%, 4-1-31		30 40
7.000%, 7-1-31		71
	. 138	

	Principal	Value
Mortgage-Backed Obligations (Continu	. '	¢ 110
7.000%, 2-1-32	\$ 99 34	\$ 113 40
7.000%, 7-1-32	68	78
5.500%, 5-1-33	30	33
5.500%, 6-1-33	32	36
4.500%, 11-1-43	458	507
J.S. Department of Veterans Affairs,		
Guaranteed REMIC Pass-Through		
Certificates, Vendee Mortgage		
Trust, Series 1997-1, Class 3A,		
8.293%, 12-15-26	24	27
		3,238
TOTAL UNITED STATES GOVERNMENT		
AGENCY OBLIGATIONS – 0.9%		\$3,238
(Cost: \$3,185)		
UNITED STATES GOVERNMENT OBLIGATIONS		
Freasury Inflation Protected Obligation	ıs – 3.6%	
J.S. Treasury Notes:	4001	4.00-
0.125%, 7-15-26	4,294	4,307
2.125%, 2-15-40	3,810	4,979
1.000%, 2-15-46	2,607	2,866
		12,102
Treasury Obligations — 17.0%		
U.S. Treasury Bonds:		
2.250%, 11-15-25	3,240	3,325
3.500%, 2-15-39	4,000	4,788
3.875%, 8-15-40	225	283
3.750%, 8-15-41	650	806
3.000%, 2-15-48	250 3,060	28′
3.000%, 8-15-48	1,750	3,442 1,972
J.S. Treasury Notes:	1,750	1,972
2.250%, 2-15-21	3,907	3,933
2.875%, 10-15-21	8,195	8,377
2.875%, 11-15-21	750	768
1.875%, 4-30-22	200	201
2.000%, 7-31-22	1,045	1,055
1.875%, 10-31-22	1,000	1,007
2.000%, 10-31-22	480	485
2.125%, 12-31-22	6,300	6,392
	2,000	2,087
2.875%, 9-30-23	600	627
2.875%, 9-30-23		F ^ ^
2.875%, 9-30-23	500	
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24	500 600	60′
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24	500 600 1,000	520 601 1,019
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24	500 600 1,000 3,635	60° 1,019 3,727
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D)	500 600 1,000 3,635 1,700	60° 1,019 3,727 1,685
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25	500 600 1,000 3,635	60° 1,019 3,727 1,685 1,298
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25 2.875%, 4-30-25	500 600 1,000 3,635 1,700 1,250 1,000	1,019 3,727 1,685 1,298 1,058
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25 2.875%, 4-30-25	500 600 1,000 3,635 1,700 1,250	601
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25 2.875%, 4-30-25 2.875%, 5-31-25	500 600 1,000 3,635 1,700 1,250 1,000 900	60° 1,019 3,727 1,685 1,298 1,058 952
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25 2.875%, 4-30-25 2.875%, 5-31-25 3.000%, 9-30-25	500 600 1,000 3,635 1,700 1,250 1,000 900	60° 1,019 3,727 1,685 1,298 1,058
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25 2.875%, 4-30-25 2.875%, 5-31-25 3.000%, 9-30-25 2.625%, 12-31-25 2.375%, 5-15-27 2.750%, 2-15-28	500 600 1,000 3,635 1,700 1,250 1,000 900 900 800	60° 1,019 3,727 1,685 1,298 1,058 952 960 838
2.875%, 9-30-23 2.875%, 10-31-23 2.750%, 11-15-23 1.750%, 6-30-24 2.125%, 9-30-24 2.250%, 10-31-24 1.500%, 11-30-24 (D) 2.500%, 1-31-25 2.875%, 4-30-25 2.875%, 5-31-25 3.000%, 9-30-25 2.625%, 12-31-25 2.375%, 5-15-27	500 600 1,000 3,635 1,700 1,250 1,000 900 900 800 340	60° 1,019 3,727 1,685 1,298 1,058 952 960 838 352

OBLIGATIONS (Continued)	Principal		Value
Treasury Obligations (Continued) 3.125%, 11-15-28	\$ 700 1,250	\$	769 1,217
		_	57,850
TOTAL UNITED STATES GOVERNME OBLIGATIONS – 20.6%	ENT	\$	70,002
(Cost: \$66,626)			
SHORT-TERM SECURITIES	Shares		
Money Market Funds (E) – 0.2% State Street Institutional U.S. Government Money Market Fund – Premier Class,			
1.550%	845	_	845
TOTAL SHORT-TERM SECURITIES –	0.2%	\$	845
(Cost: \$845)			
TOTAL INVESTMENT SECURITIES –	99.8%	\$	340,215
(Cost: \$295,502)			
CASH AND OTHER ASSETS, NET OF LIABILITIES – 0.2%	:		624
NET ASSETS – 100.0%		¢	340,839

#### Notes to Schedule of Investments

(A)No dividends were paid during the preceding 12 months.

(B)Securities were purchased pursuant to an exemption from registration available under Rule 144A under the Securities Act of 1933 and may only be resold in transactions exempt from registration, normally to qualified institutional buyers. At December 31, 2019 the total value of these securities amounted to \$5,806 or 1.7% of net assets.

(C)Variable rate security. Interest rate disclosed is that which is in effect at December 31, 2019. Description of the reference rate and spread, if applicable, are included in the security description.

(D)All or a portion of securities with an aggregate value of \$602 are on loan.

(E)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks	\$228,708	\$ -	\$—
Corporate Debt Securities	_	36,385	_
Loans	_	1,037	_
United States Government Agency Obligations	_	3,238	_
United States Government Obligations	_	70,002	_
Short-Term Securities	845	_	
Total	\$229,553	\$110,662	\$—

During the year ended December 31, 2019, securities totaling \$1,023 were transferred from Level 3 to Level 2 due to increased availability of observable market data due to increased market activity or information for these securities.

The following acronyms are used throughout this schedule:

ADR = American Depositary Receipts CMO = Collateralized Mortgage Obligation GTD = Guaranteed ICE = Intercontinental Exchange LIBOR = London Interbank Offered Rate REMIC = Real Estate Mortgage Investment Conduit REIT = Real Estate Investment Trust

See Accompanying Notes to Financial Statements.



David P. Ginther



Michael T. Wolverton

Below, David P. Ginther, CPA, and Michael T. Wolverton, CFA, portfolio managers of Ivy VIP Energy, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Ginther has managed the Portfolio since its inception in 2006 and has 24 years of industry experience. Mr. Wolverton has managed the Portfolio since 2016 and has 15 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Energy (Class II shares at net asset value)	3.48%
Benchmark and Morningstar Category	
S&P 1500 Energy Sector Index (generally reflects the performance of stocks that represent the energy market)	10.05%
Morningstar Equity Energy Category Average (generally reflects the performance of the universe of funds with similar investment objectives)	7.25%

Please note that Portfolio returns include applicable fees and expenses while index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

#### Geopolitics in the spotlight

Crude oil prices rebounded significantly higher for the fiscal year. West Texas Intermediate, the U.S. benchmark, was up over 30% after falling 45% in the fourth quarter of 2018. Energy equities continued to disconnect from the oil commodity price because of escalating tension in the U.S.-China trade war, fear of a worldwide recession that surfaced during the year and the fact that demand for oil appeared to be peaking as many around the world continue to demand a reduction in the overall carbon footprint.

Geopolitical risks around the world increased throughout the year and affected the energy market. Tensions between U.S. and Iran flared at mid-year after Iran shot down a U.S. drone and there were charges that Iran was behind attacks on oil tankers in the Straits of Hormuz. Roughly 20% of the world oil supply travels through that waterway every day, making it a key issue for global oil supply.

Saudi Arabia oil facilities then were damaged by a missile strike in September that briefly reduced production capacity. Unrest then erupted in Iran late in the year with protests and an attack on the U.S. embassy in Baghdad. It spilled over into Iraq, where demonstrators began protests against the government and Iranian influence in their country. Iran's economy continued to struggle from the effects of government policy that has led to higher inflation and unemployment.

In addition to the growing tensions in the Middle East, the oil market absorbed news that affected oil output in other producing countries, including Iran, Libya and Venezuela.

In July, member countries of the Organization of Petroleum Exporting Countries plus Russia — widely referred to as OPEC+ — agreed to extend production cuts through the first quarter of 2020 as a means of supporting the oil price. But in early December, OPEC+ announced a larger-than-expected cut in production. The additional cuts were set to come from greater compliance with quotas and Saudi Arabia's promise to reduce production if other OPEC members complied with their quotas. OPEC said it will review the cuts and could extend them through the end of 2020, depending on global economic growth and U.S. production growth.

U.S. production growth started to slow as many energy companies began to show discipline in operating within their cash flow levels, generate free cash flow and return capital to shareholders. The U.S. rig count was reduced roughly 20% in the fiscal year, evidence that many companies were trying to spend within cash flow. We believe that will lead to slower U.S. oil production growth. These changes are further evidence to us that the energy industry has a growing awareness of the demand to pursue stronger environmental, social and corporate governance (ESG) standards and to help lower the globe's carbon footprint.

#### Positive year but challenges remain

The Portfolio had a positive return for the fiscal year but underperformed both the benchmark and its Morningstar category average.

The Portfolio's five greatest contributors to performance in the fiscal year relative to the benchmark were WEX, Inc., Dril-Quip Inc., WPX Energy Inc., Cactus, Inc. and Parsley Energy, Inc.

The Portfolio's five greatest detractors from relative performance were Whiting Petroleum Corp., Continental Resources, Inc., Centennial Resource Development, Concho Resources, Inc. and Oasis Petroleum, Inc. At the end of the fiscal year, Whiting Petroleum Corp. and Centennial Resource Development were no longer holdings in the Portfolio.

At the end of the fiscal year, about 36% of the Portfolio was allocated to holdings in the Oil & Gas Exploration & Production industry segment, followed by about 26% to Oil & Gas Equipment & Services. The weighting in those industry segments detracted from relative performance versus the benchmark, which had heavier weighting to integrated oil companies.

The focus of the energy strategy remains on investing in companies that can create value over the full course of the energy cycle. We identify those as companies that are low-cost operators, have strong balance sheets, have the ability to grow profitably and have strong return on capital.

#### Outlook focuses on supply/demand

We believe the additional production cuts by OPEC+ and higher compliance will balance the oil market in the first half 2020 and move into a deficit in 2021. Natural gas will remain over supplied in 2020 despite natural gas rig count near record lows.

We anticipate that U.S. oil production growth will slow as exploration & production companies change from a growth-oriented strategy to focus on more capital discipline and generating free cash flow. Companies are focused on shareholder returns and repairing balance sheets. Spending within cash flow means lower capital expenditures (capex). With the rig count already down more than 20% from its peak, we think a reduction in capex is likely to lead to lower U.S. oil production growth.

Demand expectations have improved based on improvements in the U.S.-China trade war, accommodative fiscal policy and forecasts for improving economic growth worldwide. We believe the majority of oil demand growth will continue to come from emerging markets.

Geopolitical tensions in the Middle East are likely to continue in 2020 with unrest in Iraq and Iran. We remain concerned about the reliability of oil infrastructure in the region after the attacks in September on Saudi Arabia's oil fields. The security and cost for transportation of crude oil through the Strait of Hormuz also remains a key concern.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Investing in companies involved in one specified sector may be more risky and volatile than an investment with greater sector diversification. Investing in the energy sector can be riskier than other types of investment activities because of a range of factors, including price fluctuation caused by real and perceived inflationary trends and political developments, and the cost assumed by energy companies in complying with environmental safety regulations. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and includes reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Energy.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

Asse	t Al	loc	ation

Stocks	96.7%
Energy	90.3%
Information Technology	3.8%
Industrials	2.6%
Cash and Other Assets (Net of Liabilities), and Cash	
Equivalents+	3.3%

# **Country Weightings**

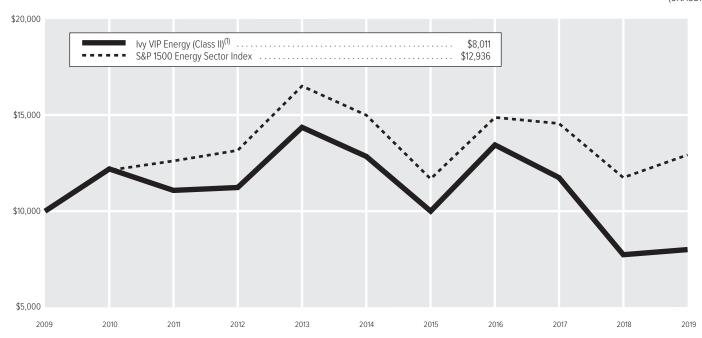
North America	91.7%
United States	87.7%
Canada	4.0%
Europe	5.0%
Cash and Other Assets (Net of Liabilities),	
and Cash Equivalents+	3.3%

# **Top 10 Equity Holdings**

Company	Country	Sector	Industry
Concho Resources, Inc.	United States	Energy	Oil & Gas Exploration & Production
Phillips 66	United States	Energy	Oil & Gas Refining & Marketing
Valero Energy Corp.	United States	Energy	Oil & Gas Refining & Marketing
Pioneer Natural Resources Co.	United States	Energy	Oil & Gas Exploration & Production
Marathon Petroleum Corp.	United States	Energy	Oil & Gas Refining & Marketing
WPX Energy, Inc.	United States	Energy	Oil & Gas Exploration & Production
Cactus, Inc., Class A	United States	Energy	Oil & Gas Equipment & Services
Parsley Energy, Inc., Class A	United States	Energy	Oil & Gas Exploration & Production
Diamondback Energy, Inc.	United States	Energy	Oil & Gas Exploration & Production
Continental Resources, Inc.	United States	Energy	Oil & Gas Exploration & Production

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class I	Class II
1-year period ended 12-31-19	3.74%	3.48%
5-year period ended 12-31-19	_	-9.01%
10-year period ended 12-31-19	_	-2.19%
Since Inception of Class through 12-31-19 <sup>(3)</sup>	-12.68%	_

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

(3)4-28-17 (the date on which shares were first acquired by shareholders).

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Energy		
Integrated Oil & Gas – 5.6%	_	
Chevron Corp		\$ 875
Hess Corp		380
Suncor Energy, Inc	32	1,064
		2,319
Oil & Gas Drilling – 3.9%	C7	70.
Patterson-UTI Energy, Inc.		704
Transocean, Inc. (A)	136	93
		1,64
Oil & Gas Equipment & Services – 24.9	9%	
Baker Hughes, Inc	50	1,292
Cactus, Inc., Class A		1,512
Core Laboratories N.V		312
Dril-Quip, Inc. (A)		1,124
Frank's International N.V. (A)		429
Halliburton Co	44	1,086
Helix Energy Solutions Group,	• • •	.,00
Inc. (A)	87	83
Liberty Oilfield Services, Inc.,		
Class A	33	37
National Oilwell Varco, Inc	12	29
NexTier Oilfield Solutions, Inc. (A)	65	438
ProPetro Holding Corp. (A)	51	579
Schlumberger Ltd	32	1,26
TechnipFMC plc (A)		81
		10,355
Oil & Gas Exploration & Production – 3		F.6.
Canadian Natural Resources Ltd		566
Concho Resources, Inc.		2,043
ConocoPhillips		664
Continental Resources, Inc.		1,465
Diamondback Energy, Inc.		1,476
EOG Resources, Inc	13	1,092
Marathon Oil Corp		94 41(
Oasis Petroleum LLC (A) Parsley Energy, Inc., Class A		1,485
Paisiey Effergy, filc., Class A Pioneer Natural Resources Co		1,400
Viper Energy Partners L.P		729
WPX Energy, Inc. (A)	117	1,604
WIA Ellergy, Ilic. (A)	117	
		14,375
Oil & Gas Refining & Marketing – 16.5	%	
Marathon Petroleum Corp	28	1,708
PBF Energy, Inc., Class A		1,218
Phillips 66		2,023
Valero Energy Corp		1,91
<u>.</u>		6,866
Oil & Gas Storage & Transportation – 4	4.9%	
Energy Transfer L.P		29
Enterprise Products Partners L.P		890
MPLX L.P		210
Rattler Midstream L.P	36	642
		2,039
Total Energy – 90.3%		37,595

Industrials	
Industrial Machinery – 2.6% Apergy Corp. (A)	\$ 1,080
Total Industrials – 2.6%	1,080
Information Technology	
Application Software $-0.4\%$ Aspen Technology, Inc. (A)	176
Data Processing & Outsourced Services – 3.4 Wright Express Corp. (A)	% 1,403
Total Information Technology – 3.8%	1,579
TOTAL COMMON STOCKS – 96.7% (Cost: \$53,129)	\$40,254
SHORT-TERM SECURITIES	
Money Market Funds(B) — 2.5% State Street Institutional U.S. Government Money Market Fund — Premier Class, 1.550%	1,055
Money Market Funds(B) — 2.5% State Street Institutional U.S. Government Money Market Fund — Premier Class,	
Money Market Funds(B) — 2.5% State Street Institutional U.S. Government Money Market Fund — Premier Class, 1.550% 1,055	
Money Market Funds(B) – 2.5% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550% 1,055  TOTAL SHORT-TERM SECURITIES – 2.5%	1,055 \$ 1,055 \$ 41,309
Money Market Funds(B) – 2.5% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%	\$ 1,055
Money Market Funds(B) – 2.5% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%	\$ 1,055

#### Notes to Schedule of Investments

(A)No dividends were paid during the preceding 12 months.

(B)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks	\$40,254	\$—	\$—
Short-Term Securities	1,055	_	_
Total	\$ 41,309	\$—	\$—

# **Country Diversification**

# (as a % of net assets)

United States	87.7%
Canada	4.0%
Switzerland	2.2%
United Kingdom	2.0%
Other Countries	0.8%
Other+	3.3%

<sup>+</sup>Includes cash and other assets (net of liabilities), and cash equivalents



Bradley M. Klapmeyer

Below, Bradley M. Klapmeyer, CFA, portfolio manager of Ivy VIP Growth, discusses positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Klapmeyer has managed the Portfolio since August 2016 and he has 20 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Growth (Class II shares at net asset value)	36.59%
Benchmark and Morningstar Category	
Russell 1000 Growth Index (generally reflects the performance of securities that represent the large-cap growth market)	36.39%
Morningstar Large Growth Category Average (generally reflects the performance of the universe of funds with similar investment objectives)	31.90%

Please note that Portfolio returns include applicable fees and expenses while index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

#### **Market conditions**

The Russell 1000 Growth Index, the Fund's benchmark, gained a remarkable 36.39% during the measurement period, which followed rather unimpressive equity market returns in 2018. Market gains started early in the calendar year as there was a recovery from a downdraft that occurred during the fourth quarter of 2018. There were fundamental factors driving the strong market returns as well, the most notable being accommodative Federal Reserve (Fed) interest rate policy and the de-escalation of the trade war with China. Over the past decade, the Russell 1000 Growth Index is up over 300%, marking an exceptionally strong decade of appreciation for growth-style investments.

The calendar year began with a quick reversal of the negative sentiment accumulated during the fourth quarter of 2018 and this reversal was mainly driven by commentary from the Fed. Post what was perceived to be policy error during fourth quarter of 2018, the Fed moved quickly to ease tightening financial conditions. The actions taken included: stepping back from quantitative tightening (balance sheet reduction) and communicating interest rate hikes will be on hold for the foreseeable future. This commentary on interest rate hikes proved to be conservative as the Fed moved to become very accommodative with policy throughout 2019.

Yields across the yield curve in the U.S. ended substantially lower than where they started in January 2019, with much of the move coming during the first half of the measurement period. Investors were clearly anticipating Fed action as worry began to increase regarding slowing global growth, continued trade war rhetoric, and weakening manufacturing data in the U.S. The pieces were assembling for an elevated risk of a more material downturn or a recession. The Fed responded to these desires, and data points, with federal funds target rate cuts of 0.25% in August, another 0.25% in September and a final 0.25% cut in October. This placed both Fed commentary and interest rates in a more accommodative position at the end of 2019 versus its position at the end of 2018.

Another pressure upon the market was the continued trade war with China, as well as with several additional trade partners, such as Europe and Mexico. As could have been anticipated given the roller coaster ride of trade tariff sentiment during the prior year, 2019 matched with a similar level of intensity and sentiment shifts. During second quarter of 2019 there was a temporary tariff spat with Mexico that resolved quickly. However, the bigger news at mid-year was the building expectation for an easing in trade tensions between U.S. and China that ultimately ended with a temporary "trade truce" between the two countries during the June G20 Summit. This truce continued to build expectations for further de-escalation in the trade war during the third and fourth quarters of 2019. Those expectations were met, concluding in December's "phase 1" deal that reduced tariffs implemented in September, withdrew the threat of escalation and promised further progress on a more comprehensive deal.

Economic data points throughout the calendar year were generally mixed with housing and labor (employment) performing well. However, the manufacturing economy moved into contraction territory as orders and production both weakened materially. We saw similar manufacturing trends globally as well.

The market clearly had a cloud of negative sentiment hanging over valuations at the start of 2019 that slowly cleared to allow beams of more optimistic sentiment drive returns toward the back half the calendar year. One of the more notable events during the year was the aggressive low quality, deep value rotation that occurred in early September. This rotation marked a clear change in narrative from concern on an economic slowdown to one of optimism, looking forward to better

growth prospects on the horizon. This sentiment shift appeared to be trigged by a confluence of factors, including many that were aforementioned — global central bank policy (easing), trade rhetoric (de-escalation) and global economic data points (slightly better). This rotation came at the expense of momentum, as the market sold the high-performing stocks.

Looking at the return by the index, factor performance showed that risk (beta) and quality (Return on Assets, Return on Capital and Return on Equity) factors were key factors driving performance during the calendar year. Value (low enterprise value to earnings before interest, taxes, depreciation and amortization [EBITDA], low price to cash flow) and growth (five-year projected earnings per share growth and earnings per share estimate revisions) were the key lagging factors during the measurement period.

#### Strategies employed, contributors and detractors

In the 12-month period ended Dec. 31, 2019, the Portfolio posted strong absolute gains and outperformed relative to its benchmark and peer category average. Stock selection drove positive attribution in industrials, consumer discretionary, consumer staples, information technology and real estate. Despite the strong absolute and relative performance there were a few notable detractors as well, including financials, communications services and health care. Even though the Portfolio held a minimal amount, cash was a detractor given the strong absolute gains during the measurement period.

From a high level, the Portfolio outperformed for much of the measurement period but did struggle during the latter months of the year. As noted in the market conditions commentary, for a large portion of 2019, investors were concerned about slowing growth and potential looming recessionary conditions. This sentiment backdrop meant that investors favored stable, less volatile growth stocks with long-term visibility into growth prospects. The Portfolio's key philosophy is to look for enduring, structurally advantaged business models that have strong long-term growth prospects, which were stocks that the market favored much of the year. These stocks were rewarded for these characteristics with higher valuations on average than the market. Stocks in the Portfolio that had exceptional returns partly due to this market dynamic, but also due to strong company-specific fundamentals, included such names as CoStar Group, Verisk Analytics, Verisign, Adobe, and MasterCard.

During the closing months of 2019, many of these same securities, despite continued strong underlying results, saw their valuations compress as investors shifted to a more positive narrative around accelerating growth thus favoring cheaper and more economically sensitive securities. At times, these rotations included strong returns for low-quality names that had been set aside as investors worried if those businesses could weather a no-growth economy. This rotation reduced the extent of full-year outperformance as many of the names that worked well for much of the year saw notable relative underperformance in those ending months. The stocks that perform well only in a period of favorable macroeconomic sentiment did well during the same time frame. These periods are difficult for the Portfolio as it remains positioned toward high quality, competitively advantaged business models that we believe perform well through-cycle and are unlikely to have significant exposure to securities that perform well during such intense rotations.

Turning back to positive contributors during the measurement period, within industrials it was an overweight position to two services stocks (CoStar Group, Inc. and Verisk Analytics, Inc.) that led the way for strong sector attribution. These stocks continued to show strong quarterly growth performance throughout the measurement period. Within consumer discretionary two notable contributors were V.F. Corp., which saw continued strong sales of Vans shoes and an improvement in trends at The North Face brand, and Ulta Beauty, which posted improving same store sales comparables for most of the year. We exited our position in Ulta Beauty during the third quarter as we saw the stock as fully valued and expectations elevated.

Within consumer staples, Estee Lauder Co., Inc. was a strong contributor as the company maintained strong momentum in emerging markets, including China, despite market fears of a consumer slowdown. We reduced our position in Estee Lauder in the back half of 2019 as we saw expectations fully embrace strong three-year growth prospects. We intend to stay exposed to the favorable long-term trends within the cosmetic/skin-care market. Within information technology, we saw strong performance from NVIDIA Corp., a leader in graphic processing units and a new position during 2019, as fundamentals in data center and gaming end markets saw improvements.

The Fund was overweight Pfizer, Inc. for the measurement period, which was a notable detractor as the stock underperformed due to the announced exit of its Upjohn business. This led investors to debate the outlook for the remaining company. We sold Pfizer during the fourth quarter. An underweight position to Apple, Inc., which posted a significant return on the back of mainly valuation expansion, was a large detractor during the period. Worth noting as detractor was our overweight position to CME Group, Inc., which performed poorly due to an environment in which uncertainty and volatility was in decline leading to lower utilization of derivative products.

#### **Outlook and positioning**

We believe there is still room for the "accelerating global growth" narrative to push cyclical, cheaper stocks higher. A change in sentiment can be a strong tailwind for a group of stocks that was set aside during a period of economic fears. This move will likely be supported by improvements in global manufacturing data around the world, as many of those indices have bottomed or are near a bottom entering 2020. We think global accommodate monetary policy will likely stimulate some level of incremental economic growth during 2020.

This reversion to mean may support that positive narrative temporarily, but sustained improvements in earnings growth would be required for sustained outperformance of value-style securities. We are somewhat skeptical that the fourth minicycle of this decade long bull market will create enough economic momentum to sustain a durable rally in value. We think more likely is continued mediocre growth that is unable to resuscitate structurally challenged businesses without an overall stronger environment in which to operate. We think a modest growth environment is positive for our style of investing and good for active management as there will be more dispersion and separation between contributors and detractors.

Excesses, such as consumer debt, manufacturing inventories, corporate debt coverage, and business investment, are just not apparent this cycle. While this suggests limited excesses to worry about on the downside, this could also remove the catalysts for upside momentum as there are less economic input troughing and bouncing off a bottom. Sometimes a sharp correction sows the seeds for a strong growth recovery. The ability to create a strong growth cycle from monetary policy or fiscal stimulus may be waning in an environment of decent housing, low unemployment, rational business investment and appropriate inventories.

We exited the year with the Portfolio positioned for moderately improving economic growth. We did add some high-quality cyclical exposure, specifically where we see an overly discounted downside economic scenario already embedded, such as in Caterpillar, Inc. within industrials. Another name providing high-quality cyclical exposure is Stanley Black & Decker, Inc., where we see a potential benefit from easing headwinds (tariffs, inputs prices) combined with strong company-specific growth drivers. As always, our goal is to select stocks based on three- to five-year growth prospects rather than near-term revisions arising from macro factors. As valuation spreads between cyclicals and non-cyclicals compress, our goal is to sift through those adjustments and add exposure to long-term stories where current valuation understates our view of the company's long-term prospects.

As of calendar year end 2019, the Portfolio's largest positions are Microsoft Corp., Apple, Inc., Alphabet, Inc., Visa, Inc., Amazon.com, Inc., Facebook, Inc., Coca-Cola Co. (The), Booking Holdings, Inc., Cerner Corp. and Motorola Solutions, Inc. Thank you for your continued interest and support.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment. Prices of growth stocks may be more sensitive to changes in current or expected earnings than the prices of other stocks. Growth stocks may not perform as well as value stocks or the stock market in general. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio manager and are current only through the end of the period of the report as stated on the cover. The manager's views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and include reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Growth.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

# **Asset Allocation**

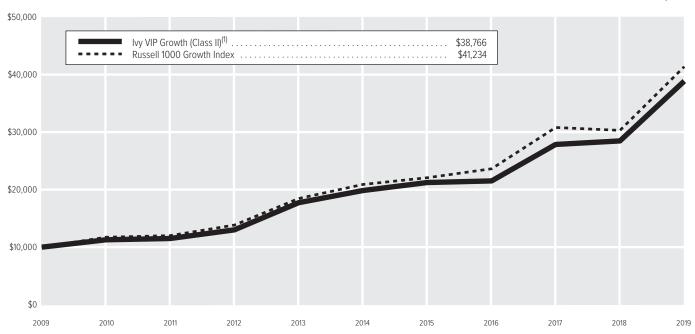
Stocks	99.4%
Information Technology	37.2%
Consumer Discretionary	15.7%
Health Care	12.6%
Communication Services	12.2%
Industrials	11.9%
Consumer Staples	4.2%
Financials	3.5%
Real Estate	2.1%
Liabilities (Net of Cash and Other Assets), and Cash	
Equivalents+	0.6%

# **Top 10 Equity Holdings**

Company	Sector	Industry
Microsoft Corp.	Information Technology	Systems Software
Apple, Inc.	Information Technology	Technology Hardware, Storage & Peripherals
Alphabet, Inc., Class A	Communication Services	Interactive Media & Services
Visa, Inc., Class A	Information Technology	Data Processing & Outsourced Services
Amazon.com, Inc.	Consumer Discretionary	Internet & Direct Marketing Retail
Cerner Corp.	Health Care	Health Care Technology
Facebook, Inc., Class A	Communication Services	Interactive Media & Services
Coca-Cola Co. (The)	Consumer Staples	Soft Drinks
Booking Holdings, Inc.	Consumer Discretionary	Internet & Direct Marketing Retail
Motorola, Inc.	Information Technology	Communications Equipment

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class II
1-year period ended 12-31-19	36.59%
5-year period ended 12-31-19	14.41%
10-year period ended 12-31-19	14.51%

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Interactive Home Entertainment – 1.9 Electronic Arts, Inc. (A)		\$ 14,958
Interactive Media & Services – 9.0% Alphabet, Inc., Class A (A)	29 6 118	38,456 8,437 24,141
r deebook, me., class A (A)	110	
Movies & Entertainment – 1.3% Walt Disney Co. (The)	75	71,034
Total Communication Services – 12.29	%	96,840
Consumer Discretionary	-	,-
Apparel, Accessories & Luxury Goods V.F. Corp.		14,761
Automobile Manufacturers – 1.9% Ferrari N.V.	90	14,856
Footwear – 2.4% NIKE, Inc., Class B	192	19,480
Home Improvement Retail – 2.2% Home Depot, Inc. (The)	79	17,294
Internet & Direct Marketing Retail — 7. Amazon.com, Inc. (A)		35,346 22,441 57,787
Total Consumer Discretionary – 15.7%		124,178
Consumer Staples		
Personal Products – 1.2% Estee Lauder Co., Inc. (The), Class A	44	9,176
Soft Drinks – 3.0% Coca-Cola Co. (The)	430	23,799
Total Consumer Staples – 4.2%		32,975
Financials		
Financial Exchanges & Data — 3.5% CME Group, Inc	75 46	15,149 12,535 27,684
Total Financials—3.5%		27 604
		27,684
Health Care		
Biotechnology – 1.5% Vertex Pharmaceuticals, Inc. (A)	53	11,678
Health Care Equipment – 3.5% Danaher Corp	103	15,815

COMMON STOCKS (Continued)	Shares	Value
Health Care Equipment (Continued) Intuitive Surgical, Inc. (A)	20	\$ 11,868
		27,683
Health Care Technology – 3.0% Cerner Corp.	329	24,160
Life Sciences Tools & Services – 1.2% Illumina, Inc. (A)	28	9,441
Managed Health Care – 1.9% UnitedHealth Group, Inc.	50	14,841
Pharmaceuticals – 1.5% Zoetis, Inc.	89	11,829
Total Health Care – 12.6%		99,632
Industrials		
Aerospace & Defense – 2.6% Boeing Co. (The)	28 34	9,207 11,559
·		20,766
Construction Machinery & Heavy Truck Caterpillar, Inc.	ks – 1.8% 94	13,905
Industrial Machinery – 2.4% Stanley Black & Decker, Inc	114	18,860
Railroads – 1.2% Union Pacific Corp.	53	9,560
Research & Consulting Services – 2.6' CoStar Group, Inc. (A)	15	9,221 11,308 20,529
Trucking – 1.3% J.B. Hunt Transport Services, Inc	86	10,065
Total Industrials – 11.9%		93,685
Information Technology		
Application Software – 6.9% Adobe, Inc. (A)	65 60 74	21,312 15,635 17,473 54,420
Communications Equipment – 2.7% Motorola, Inc.	136	21,859
Data Processing & Outsourced Service Broadridge Financial Solutions, Inc FleetCor Technologies, Inc. (A) MasterCard, Inc., Class A	86 35 35 136	% 10,631 10,178 10,563 14,697 37,496 83,565

COMMON STOCKS (Continued)	Shares	١	/alue
Internet Services & Infrastructure – 1 VeriSign, Inc. (A)		\$	8,725
IT Consulting & Other Services — 0.6 Garter, Inc., Class A (A)		_	4,806
Systems Software – 9.1% Microsoft Corp.	. 458	_	72,177
Technology Hardware, Storage & Pe Apple, Inc.		s – 6	6.2% 48,779
Total Information Technology – 37.2	!%	2	294,331
Real Estate			
Specialized REITs – 2.1% American Tower Corp., Class A Equinix, Inc	. 28		6,338
Equilix, IIIc.			
Equilia, inc.			16,937
Total Real Estate – 2.1%		_	16,937
		\$7	
Total Real Estate – 2.1%		\$7	16,937
Total Real Estate – 2.1%  TOTAL COMMON STOCKS – 99.4%		\$7	16,937
TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) – 0.6% State Street Institutional U.S.		\$7	16,937
TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES Money Market Funds (B) – 0.6%		\$7	16,937
TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) – 0.6% State Street Institutional U.S. Government Money Market Fund	. 4,460	\$77	16,937
Total Real Estate – 2.1%  TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) – 0.6% State Street Institutional U.S. Government Money Market Fund – Premier Class,	,	\$77	16,937 86,262
Total Real Estate – 2.1%  TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) – 0.6% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%	,	_	16,937 86,262 4,460
Total Real Estate – 2.1%  TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) – 0.6% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%  TOTAL SHORT-TERM SECURITIES – 0	0.6%	\$	16,937 86,262 4,460
Total Real Estate — 2.1%  TOTAL COMMON STOCKS — 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) — 0.6% State Street Institutional U.S. Government Money Market Fund — Premier Class, 1.550%  TOTAL SHORT-TERM SECURITIES — (Cost: \$4,460)	0.6%	\$	16,937 86,262 4,460 4,460
TOTAL COMMON STOCKS – 99.4% (Cost: \$540,040)  SHORT-TERM SECURITIES  Money Market Funds (B) – 0.6% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%  TOTAL SHORT-TERM SECURITIES – (Cost: \$4,460)  TOTAL INVESTMENT SECURITIES – 1	0.6%	\$	16,937 86,262 4,460 4,460

#### Notes to Schedule of Investments

(A)No dividends were paid during the preceding 12 months.

(B)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets	,		
Investments in Securities			
Common Stocks	\$786,262	\$—	\$—
Short-Term Securities	4,460	_	_
Total	\$790,722	\$—	\$—

The following acronym is used throughout this schedule:

REIT = Real Estate Investment Trust

(UNAUDITED)



Chad A. Gunther

Below, Chad Gunther, portfolio manager of Ivy VIP High Income, discusses positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Gunther has managed the Portfolio since July 2014, and has 22 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP High Income (Class II shares at net asset value)	11.19%
Benchmark and Morningstar Category	
ICE Bank of America Merrill Lynch US High Yield Index (generally reflects the performance of securities representing the high-yield sector of the bond market)	14.41%
Morningstar High Yield Bond Category Average (generally reflects the performance of the universe of funds with similar investment objectives)	12.62%

Please note that the Portfolio returns include applicable investment fees and expenses, whereas the index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

#### **Performance**

The Portfolio ended the fiscal year with a double-digit return, but underperformed its benchmark and Morningstar peer group category average. Compared to the Portfolio's all-bond benchmark, as well as our peer group, we are underweight high-yield bonds. This detracted from our performance as bank loans underperformed high yield in 2019. The allocation to loans was the largest detractor from performance. Additionally, credit selection inside our loan portfolio in the mining, oil & gas and retail sectors detracted from relative performance. Conversely, the selection effect of our bond portfolio outperformed the index and peer group in 2019.

### **Market Sector Update**

The high-yield sector posted a full-year return of 14.08%, as measured by JPMorgan. Meanwhile, leveraged loans returned 8.64% for the full year. Overall in fiscal year 2019, B-rated returned 15.69% and outperformed BB-rated and CCC-rated bonds, which returned 15.61% and 11.25%, respectively. Default activity in bonds and loans decreased to \$1.2 billion in December, the lowest level since January 2019. This is compared to an average monthly default rate of \$4.9 billion, \$3.6 billion and \$3.1 billion in 2019, 2018 and 2017, respectively. Sectors contributing to this year's default activity were energy (44%), healthcare (9%) and retail (9%). The full-year U.S. default rate was 2.86%.

Bond yields declined sharply in December as completion of phase-one of the U.S.-China trade deal came into focus. Yields and spreads decreased 44 basis points (bps) and 46 bps in December to 5.91% and 424 bps, respectively. Yields on the high-yield index ended the fiscal year below 6% for the first time since January 2018.

In the final month of the calendar year, after underperforming for seven consecutive months, lower rated CCC bonds returned 5.08% and meaningfully outperformed B and BB bonds, which returned 2.36% and 1.37%, respectively. Energy was the largest outperformer in December at 5.79%, but lagged the broader index for the year.

The high-yield universe had strong new issuance in the final quarter of the fiscal year with \$78 billion of new bonds. Refinancing continues to lead among the use of proceeds for the 35th straight month. In terms of full-year new issuance by ratings, split BBB or BB accounted for the highest volume at 47% of total volume; CCC or non-rated was the lowest volume at 10%.

Leveraged loans ended the fiscal year with December posting the strongest gains since January. For the fiscal year, leveraged loans returned 8.64%, but underperformed the high-yield and investment-grade sectors which returned 14.08% and 14.10%, respectively. Loan funds reported their 15th consecutive outflow in December, albeit it was one of the lowest outflows of the fiscal year at approximately \$1 billion. The last four quarters rank among the eight largest quarterly outflows on record.

New issue activity picked up considerably for leveraged loans during the final quarter of the fiscal year with \$141.3 billion priced versus \$93 billion, \$91 billion and \$67 billion in the third, second and first quarters, respectively. Similar to bonds, refinancing was the main use of proceeds.

#### **Portfolio Positioning**

The Portfolio's allocation across asset classes remained steady, ending the year with 64.5% bonds, 22.1% loans, 5.4% other and 7.8% cash. The Portfolio's weighting by rating category is 12.9% BB, 47.1% B, and 23.8% CCC, as measured by Standard & Poor's. The breakdown of our loan portfolio is 17% first lien and 4% second lien.

Leveraged loans continue to offer attractive yields relative to their seniority in the capital structure. First-lien loans are the largest loan category and one of the most senior parts of the capital structure. In times of stress and volatility, loans offer the potential for more stability and outperformance as compared to high-yield debt and equity.

As we assess the market uncertainty around tariffs and trade, we have become more cautious about the risks we are taking. The outperformance of BB-rated bonds in 2019 has mostly been rate driven as the 10-year U.S. Treasury yield moved from 2.68% at the beginning of the year to 1.92% at the end of the year. We continue to view our loan portfolio as a replacement for our exposure in the BB category. The yield pick-up in loans relative to expensive BB-rated paper reinforces our allocation to leveraged loans.

#### **Looking towards 2020**

The Federal Reserve's (Fed) early-year dovish approach to interest rate policy had an effect on high-yield bonds as the bonds became the preferred way to lock in cheaper borrowing rates. As economic indicators stabilized toward the end of calendar year 2019 and phase-one of a U.S.-China trade pact became clear, there was a late-year increase in issuance and a better-bid in the secondary market.

As the market becomes more comfortable that the Fed is done cutting rates, we believe outflows from the loan asset class should cease which would reverse the large technical (supply/demand changes) that the loan market experienced in 2019. However, still looming over the market in 2020 are the presidential impeachment proceedings, the 2020 U.S. presidential election, unrest in the Middle East and questions around the trajectory of global growth. On the flip side, the strong labor market continues to help consumer confidence, the Fed and global central banks are easing and providing stimulus, which in turn has continued to help sectors such as housing and building materials.

We believe replicating the returns experienced this past fiscal year may be extremely difficult as spreads sit close to 400 bps versus 570 bps when the fiscal year started. Market predictions for high yield performance in 2020 indicates expectations for single-digit returns, while S&P Global Ratings expect the corporate default rate to rise to 3.9% by the end of 3Q 2020, driven by more energy sector defaults. As always, our focus when evaluating investments is a company's business model and competitive advantages in order to weather a recession and perform throughout the cycle.

Past performance is not a guarantee of future results. As with any investment, the value of the Portfolio's shares will change, and you could lose money on your investment.

International investing involves additional risks including currency fluctuations, political or economic conditions affecting the foreign country, and differences in accounting standards and foreign regulations.

Fixed-income securities are subject to interest rate risk and, as such, the Fund's net asset value may fall as interest rates rise. Investing in high-income securities may carry a greater risk of non-payment of interest or principal than higher-rated bonds. In addition to the risks typically associated with fixed-income securities, loan participations in which the fund may invest carry other risks including the risk of insolvency of the lending bank or other intermediary. Loan participations may be unsecured or not fully collateralized, may be subject to restrictions on resale and sometimes trade infrequently on the secondary market. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio manager and are current only through the end of the period of the report as stated on the cover. The manager's views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged, includes reinvested dividends, and does not include fees. One cannot invest directly in an index, nor is an index representative of the Ivy VIP High Income.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	5.5%
Financials	2.9%
Consumer Discretionary	1.7%
Energy	0.9%
Health Care	0.0%
Consumer Staples	0.0%
Industrials	0.0%
Warrants	0.0%
Bonds	85.4%
Corporate Debt Securities	63.3%
Loans	22.1%
Cash and Other Assets (Net of Liabilities), and Cash Equivalents+	9.1%

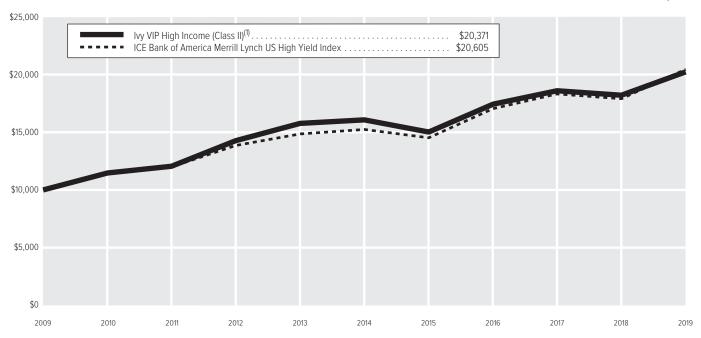
# **Quality Weightings**

Non-Investment Grade	85.4%
BB	7.7%
В	48.4%
CCC	25.5%
Below CCC	1.5%
Non-rated	2.3%
Cash and Other Assets (Net of Liabilities), Cash Equivalents+	
and Equities	14.6%

Our preference is to always use ratings obtained from Standard & Poor's, Moody's, and Fitch. It is each Portfolio's general policy to classify such security at the lower rating level if only two ratings are available. If more than two ratings are available and a median exists, the median is used. If more than two ratings exist without a median, the lower of the two middle ratings is used. We do not evaluate these ratings, but simply assign them to the appropriate credit quality category as determined by the rating agency.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class I	Class II
1-year period ended 12-31-19	11.49%	11.19%
5-year period ended 12-31-19	_	4.75%
10-year period ended 12-31-19	_	7.37%
Since Inception of Class through 12-31-19 <sup>(3)</sup>	4.73%	_

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be

(3)4-28-17 (the date on which shares were first acquired by shareholders).

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Consumer Discretionary		
Apparel Retail – 0.0% True Religion Apparel, Inc. (A)(B)	13	\$ -*
Casinos & Gaming – 0.0% New Cotai Participation Corp., Class B (A)(B)(C)	_*	
Education Services — 0.9% Laureate Education, Inc., Class A (A)	443	7,795
Hotels, Resorts & Cruise Lines – 0.8% Studio City International Holdings Ltd. ADR (A)	343	6,862
Total Consumer Discretionary – 1.7%		14,657
Consumer Staples		,
Agricultural Products — 0.0% ASG Warrant Corp. (A)(B)	1	
Total Consumer Staples – 0.0%		_
Energy		
Coal & Consumable Fuels – 0.0% Westmoreland Coal Co. (A)	29	344
Oil & Gas Equipment & Services — 0.09 Larchmont Resources LLC (A)(B)(C)(D)(E)	1 21	252 14 ————
Oil & Gas Exploration & Production $-0$ Bellatrix Exploration Ltd. (A)(B)(D) Sabine Oil & Gas Corp. (A)(B)(C)		* 19 19
Total Energy 0.0%		629
Total Energy – 0.0%  Health Care		029
Pharmaceuticals – 0.0% Advanz Pharma Corp. (A)(D)	35	96
Total Health Care – 0.0%		96
Industrials		
Air Freight & Logistics – 0.0% BIS Industries Ltd. (A)(B)(C)	1,605	79
Total Industrials – 0.0%		79
TOTAL COMMON STOCKS – 1.7%		\$15,461
(Cost: \$13,362)		

INVESTMENT FUNDS	Shares	Value
Registered Investment Companies –	2.9%	
iShares iBoxx \$ High Yield Corporate Bond ETF	290	\$25,503
TOTAL INVESTMENT FUNDS – 2.9%		\$25,503
(Cost: \$25,202)		
PREFERRED STOCKS		
Consumer Staples		
Agricultural Products – 0.0%		
Pinnacle Agriculture Enterprises LLC (A)(B)(C)	4,583	_*
( )(-)(-)	,,	
Total Consumer Staples – 0.0%		_*
Energy		
Oil & Gas Exploration & Production –	0.9%	
Targa Resources Corp., 9.500% (A)(C)	8	8,211
Total Energy – 0.9%		8,211
TOTAL PREFERRED CTOCKS A 00%		<b>.</b> 0.244
TOTAL PREFERRED STOCKS – 0.9% (Cost: \$10,499)		\$ 8,211
(COSt. \$10,433)		
WARRANTS		
Oil & Gas Exploration & Production – Ultra Resources, Inc., expires	0.0%	
7-14-25 (F)	20	1
TOTAL WARRANTS – 0.0%		\$ 1
(Cost: \$5)		
CORPORATE DEBT SECURITIES	Principal	
Communication Services		
Alternative Carriers – 0.1%		
Consolidated Communications Finance II Co.,		
6.500%, 10-1-22 (G)	\$ 926	838
Broadcasting – 1.1%		
Clear Channel Outdoor Holdings, Inc.,		
5.125%, 8-15-27 (H)	5,508	5,735
Clear Channel Worldwide Holdings, Inc.,		
9.250%, 2-15-24 (H)	3,979	4,407
		10,142
Cable & Satellite – 8.0%		
Altice Financing S.A.: 6.625%, 2-15-23 (H)	950	966
7.500%, 5-15-26 (H)	4,462	4,797
Altice France S.A.: 7.375%, 5-1-26 (H)	7,396	7,941
8.125%, 2-1-27 (H)	6,013	6,772
Altice Luxembourg S.A., 10.500%, 5-15-27 (H)	11,289	12,870
10.300 /o, 3-13-27 (F)	11,209	12,0/0 1

CORPORATE DEBT SECURITIES (Continued)	Principal	Value
Cable & Satellite (Continued)		
Altice S.A., 7.625%, 2-15-25 (H)	\$5,952	\$ 6,190
Altice U.S. Finance I Corp., 5.500%, 5-15-26 (H) CCO Holdings LLC and CCO	2,745	2,906
Holdings Capital Corp.:		
5.500%, 5-1-26 (H)	1,187 4,233	1,251 4,442
CSC Holdings LLC:		,
5.375%, 2-1-28 (H)	4,930 1,372	5,257 1,464
DISH DBS Corp.: 5.875%, 7-15-22	2,310	2,449
5.875%, 11-15-24	1,724	1,762
7.750%, 7-1-26	2,821	2,988
6.625%, 10-15-25 (H)	788	836
6.875%, 1-15-24 (H)	8,223	8,408
		71,299
Integrated Telecommunication Serv	ices – 3.5°	%
Frontier Communications Corp.: 6.875%, 1-15-25	6,315	3,063
11.000%, 9-15-25	8,236	3,994
8.500%, 4-1-26 (H)	11,690	11,836
8.500%, 10-15-25 (H)	15,487	12,390
		31,283
Publishing – 0.4%		
MDC Partners, Inc., 6.500%, 5-1-24 (H)	3,426	3,101
Wireless Telecommunication Service Digicel Group Ltd.:	e – 1.5%	
6.000%, 4-15-21 (H)	1,965	1,533
8.250%, 9-30-22 (H)	760	182
8.250%, 12-30-22 (H)	3,033	1,691
9.125%, 4-1-24 (H)(I)	3,263	498
Digicel International Finance Ltd., 8.750%, 5-25-24 (H)	8,401	8,191
Digicel Ltd., 6.750%, 3-1-23 (H)	2,507	1,454
		13,549
Total Communication Services – 14.	6%	130,212
Consumer Discretionary		
Automotive Retail – 0.4%		
Allison Transmission, Inc., 5.000%, 10-1-24 (H)	781	800
Lithia Motors, Inc., 4.625%, 12-15-27 (H)	1,119	1,150
Sonic Automotive, Inc., 6.125%, 3-15-27	1,198	1,249
	•	3,199
Casinos & Gaming – 2.1%		
Boyd Gaming Corp.,		
4.750%, 12-1-27 (H)	2,089	2,170

Everi Payments, Inc., 7.500%, 12-15-25 (H) \$4,320 \$4,633 Gateway Casinos & Entertainment Ltd., 8.250%, 3-1-24 (H) 2,450 2,505 Golden Nugget, Inc., 6.750%, 10-15-24 (H) 5,273 5,458 Scientific Games International, Inc. (GTD by Scientific Games Corp.): 7.000%, 5-15-28 (H) 282 302 7.250%, 11-15-29 (H) 282 306 Wynn Macau Ltd.: 4.875%, 10-1-24 (H) 855 874 5.500%, 10-1-27 (H) 2,301 2,393 5.125%, 12-15-29 (H) 421 430 19,071 Education Services — 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 20,694 Hotels, Resorts & Cruise Lines — 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 2,684 Leisure Facilities — 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 2,300 Specialized Consumer Services — 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H) 2,371 2,380 Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 899 3,279 Specialty Stores — 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259 Staples, Inc.: 7.500%, 4-15-27 (H) 7,355 7,465 26,283 Total Consumer Discretionary — 8.7% 77,510 Consumer Staples Food Distributors — 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 Food Distributors — 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823	Gateway Casinos & Entertainment Ltd.,	
7.500%, 12-15-25 (H) \$4,320 \$4,633 Gateway Casinos & Entertainment Ltd., 8.250%, 3-1-24 (H) 2,450 2,505 Golden Nugget, Inc., 6.750%, 10-15-24 (H) 5,273 5,458 Scientific Games International, Inc. (GTD by Scientific Games Corp.): 7.000%, 5-15-28 (H) 282 302 7.250%, 11-15-29 (H) 282 306 Wynn Macau Ltd.: 4.875%, 10-1-24 (H) 855 874 5.500%, 10-1-27 (H) 2,301 2,393 5.125%, 12-15-29 (H) 421 430 19,071 Education Services – 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 20,694 Hotels, Resorts & Cruise Lines – 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 2,684 Leisure Facilities – 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 2,300  Specialized Consumer Services – 0.4% Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 10-1-21 (H) 2,371 2,380 Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 899 3,279  Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259 Staples, Inc.: 7.500%, 4-15-27 (H) 7,355 7,465 26,283  Total Consumer Discretionary – 8.7%  Consumer Staples Food Distributors – 0.4% Performance Food Group, Inc.: 5.500%, 61-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518	7.500%, 12-15-25 (H) \$ 4,320 Gateway Casinos & Entertainment Ltd.,	
Gateway Casinos & Entertainment Ltd., 8.250%, 3-1-24 (H)	Gateway Casinos & Entertainment Ltd.,	¢ 4.000
Ltd., 8.250%, 3-1-24 (H)	Ltd.,	\$ 4,633
8.250%, 3-1-24 (H)		
Golden Nugget, Inc., 6.750%, 10-15-24 (H) 5,273 5,458 Scientific Games International, Inc. (GTD by Scientific Games Corp.): 7.000%, 5-15-28 (H) 282 302 7.250%, 11-15-29 (H) 282 306 Wynn Macau Ltd.: 4.875%, 10-1-24 (H) 855 874 5.500%, 10-1-27 (H) 2,301 2,393 5.125%, 12-15-29 (H) 421 430  19,071  Education Services – 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 20,694  Hotels, Resorts & Cruise Lines – 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 2,684  Leisure Facilities – 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 2,300  Specialized Consumer Services – 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H) 2,371 2,380  Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 899  3,279  Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259  Staples, Inc.: 7.500%, 4-15-27 (H) 7,355 7,465  26,283  Total Consumer Discretionary – 8.7%  Consumer Staples Food Distributors – 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518		2 505
6.750%, 10-15-24 (H) 5,273 5,458 Scientific Games International, Inc. (GTD by Scientific Games Corp.): 7.000%, 5-15-28 (H) 282 302 7.250%, 11-15-29 (H) 282 306 Wynn Macau Ltd.: 4.875%, 10-1-24 (H) 855 874 5.500%, 10-1-27 (H) 2,301 2,393 5.125%, 12-15-29 (H) 241 430 19,071 Education Services — 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 20,694 Hotels, Resorts & Cruise Lines — 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 2,684 Leisure Facilities — 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 2,300  Specialized Consumer Services — 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H) 2,371 2,380 Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 899 3,279  Specialty Stores — 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259 Staples, Inc.: 7.500%, 4-15-27 (H) 7,355 7,465 26,283  Total Consumer Discretionary — 8.7%  Consumer Staples Food Distributors — 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518	* * * * * * * * * * * * * * * * * * * *	2,000
(GTD by Scientific Games Corp.): 7.000%, 5-15-28 (H)	55	5,458
7.000%, 5-15-28 (H) 282 302 7.250%, 11-15-29 (H) 282 306 Wynn Macau Ltd.: 4.875%, 10-1-24 (H) 855 874 5.500%, 10-1-27 (H) 2,301 2,393 5.125%, 12-15-29 (H) 421 430  Education Services — 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 20,694  Hotels, Resorts & Cruise Lines — 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 2,684  Leisure Facilities — 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 2,300  Specialized Consumer Services — 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H) 2,371 2,380  Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 899  3,279  Specialty Stores — 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259 Staples, Inc.: 7.500%, 4-15-26 (H) 16,924 17,559 7,465 26,283  Total Consumer Discretionary — 8.7%  Total Consumer Discretionary — 8.7%  Consumer Staples  Food Distributors — 0.4% Performance Fo-0-24 (H) 2,754 2,823 5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518	Scientific Games International, Inc.	
7.250%, 11-15-29 (H) 282 Wynn Macau Ltd.: 4.875%, 10-1-24 (H) 855 5.500%, 10-1-27 (H) 2,301 5.125%, 12-15-29 (H) 421 430 19,071 Education Services — 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 Education Services — 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 Edisure Facilities — 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 Especialized Consumer Services — 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H) 2,371 Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 Specialty Stores — 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 Staples, Inc.: 7.500%, 4-15-26 (H) 16,924 10.750%, 4-15-27 (H) 7,355 Total Consumer Discretionary — 8.7%  Total Consumer Discretionary — 8.7%  Consumer Staples Food Distributors — 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 5.500%, 10-15-27 (H) 485 518		
Wynn Macau Ltd.:  4.875%, 10-1-24 (H)		
4.875%, 10-1-24 (H)		300
5.500%, 10-1-27 (H) 2,301 2,391 3.125%, 12-15-29 (H) 421 430 19,071  Education Services – 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H) 19,228 20,694  Hotels, Resorts & Cruise Lines – 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H) 2,468 2,684  Leisure Facilities – 0.3% Cedar Fair L.P., Magnum Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27 2,137 2,300  Specialized Consumer Services – 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H) 2,371 2,380  Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) 896 899 3,279  Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259 Staples, Inc.: 7.500%, 4-15-26 (H) 16,924 17,559 7,465 26,283  Total Consumer Discretionary – 8.7%  Consumer Staples Food Distributors – 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518	,	874
5.125%, 12-15-29 (H)		2,393
Education Services — 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H)		430
Education Services — 2.3% Laureate Education, Inc., 8.250%, 5-1-25 (H)		19 071
Laureate Education, Inc., 8.250%, 5-1-25 (H)		13,07
8.250%, 5-1-25 (H)	Education Services – 2.3%	
Hotels, Resorts & Cruise Lines – 0.3% Boyne USA, Inc., 7.250%, 5-1-25 (H)		20.604
Boyne USA, Inc., 7.250%, 5-1-25 (H)	8.250%, 5-1-25 (H) 19,228	20,694
7.250%, 5-1-25 (H)	Hotels, Resorts & Cruise Lines – 0.3%	
Leisure Facilities — 0.3%  Cedar Fair L.P., Magnum  Management Corp., Canada's  Wonderland Co. and Millennium  Operations LLC, 5.375%, 4-15-27	Boyne USA, Inc.,	
Cedar Fair L.P., Magnum       Management Corp., Canada's         Wonderland Co. and Millennium       Operations LLC,         5.375%, 4-15-27       2,137         Specialized Consumer Services – 0.4%         Nielsen Co. (Luxembourg) S.a.r.l.         (The),       2,371         5.500%, 10-1-21 (H)       2,371         2,380         Nielsen Finance LLC and Nielsen         Finance Co.,       896         5.000%, 4-15-22 (H)       896         899         3,279         Specialty Stores – 2.9%         Party City Holdings, Inc.,       6.625%, 8-1-26 (G)(H)       1,785       1,259         Staples, Inc.:       7.500%, 4-15-26 (H)       16,924       17,559         Staples, Inc.:       7.500%, 4-15-27 (H)       7,355       7,465         26,283         Total Consumer Discretionary – 8.7%       77,510         Consumer Staples       Food Distributors – 0.4%       Performance Food Group, Inc.:         5.500%, 6-1-24 (H)       2,754       2,823         5.500%, 10-15-27 (H)       485       518	7.250%, 5-1-25 (H) 2,468	2,684
Cedar Fair L.P., Magnum       Management Corp., Canada's         Wonderland Co. and Millennium       Operations LLC,         5.375%, 4-15-27       2,137         Specialized Consumer Services – 0.4%         Nielsen Co. (Luxembourg) S.a.r.l.         (The),       2,371         5.500%, 10-1-21 (H)       2,371         2,380         Nielsen Finance LLC and Nielsen         Finance Co.,       896         5.000%, 4-15-22 (H)       896         899         3,279         Specialty Stores – 2.9%         Party City Holdings, Inc.,       6.625%, 8-1-26 (G)(H)       1,785       1,259         Staples, Inc.:       7.500%, 4-15-26 (H)       16,924       17,559         Staples, Inc.:       7.500%, 4-15-27 (H)       7,355       7,465         26,283         Total Consumer Discretionary – 8.7%       77,510         Consumer Staples       Food Distributors – 0.4%       Performance Food Group, Inc.:         5.500%, 6-1-24 (H)       2,754       2,823         5.500%, 10-15-27 (H)       485       518	Loisuro Encilitios 0.29/	
Management Corp., Canada's Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27		
Wonderland Co. and Millennium Operations LLC, 5.375%, 4-15-27	. 9	
5.375%, 4-15-27	• • • • • • • • • • • • • • • • • • • •	
Specialized Consumer Services — 0.4% Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H)	Operations LLC,	
Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H)	5.375%, 4-15-27 2,137	2,300
Nielsen Co. (Luxembourg) S.a.r.l. (The), 5.500%, 10-1-21 (H)	Specialized Concumer Services 0.49/	
(The), 5.500%, 10-1-21 (H)	·	
\$ 2,380 \\ Nielsen Finance LLC and Nielsen Finance Co., 5.000%, 4-15-22 (H) \\ Specialty Stores = 2.9% \\ Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) \\ 1,7500%, 4-15-26 (H) \\ 10.750%, 4-15-27 (H) \\  Total Consumer Discretionary = 8.7% \\ Consumer Staples Food Distributors = 0.4% \\ Performance Food Group, Inc.: 5.500%, 6-1-24 (H) \\ 5.500%, 6-1-24 (H) \\ 2,754 \\ 2,823 \\ 5.500%, 10-15-27 (H) \\ 2,754 \\ 2,823 \\ 5.58	. 5,	
Finance Co., 5.000%, 4-15-22 (H) 896 899 3,279  Specialty Stores – 2.9%  Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259  Staples, Inc.: 7.500%, 4-15-26 (H) 16,924 17,559 7,465 26,283  Total Consumer Discretionary – 8.7%  Consumer Staples  Food Distributors – 0.4%  Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 5,500%, 10-15-27 (H) 485 518		2,380
5.000%, 4-15-22 (H) 896 899  3,279  Specialty Stores – 2.9%  Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 1,259  Staples, Inc.: 7.500%, 4-15-26 (H) 16,924 17,559 10.750%, 4-15-27 (H) 7,355 7,465  26,283  Total Consumer Discretionary – 8.7%  Consumer Staples  Food Distributors – 0.4%  Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518	Nielsen Finance LLC and Nielsen	
3,279   Specialty Stores = 2.9%     Party City Holdings, Inc.,     6.625%, 8-1-26 (G)(H)   1,785   1,259     Staples, Inc.:   7.500%, 4-15-26 (H)   16,924   17,559     10.750%, 4-15-27 (H)   7,355   7,465     26,283     Total Consumer Discretionary = 8.7%   77,510     Consumer Staples     Food Distributors = 0.4%     Performance Food Group, Inc.:     5.500%, 6-1-24 (H)   2,754   2,823     5.500%, 10-15-27 (H)   485   518		
Specialty Stores — 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)		899
Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	5.000%, 4-15-22 (H) 896	3,279
Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	5.000%, 4-15-22 (H)	
6.625%, 8-1-26 (G)(H)		
7.500%, 4-15-26 (H) 16,924 17,559 10.750%, 4-15-27 (H) 7,355 7,465 26,283  Total Consumer Discretionary – 8.7% 77,510  Consumer Staples Food Distributors – 0.4% Performance Food Group, Inc.: 5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H) 485 518	Specialty Stores – 2.9%	
10.750%, 4-15-27 (H)	Specialty Stores — 2.9% Party City Holdings, Inc.,	1,259
26,283   77,510   Consumer Staples   Food Distributors - 0.4%   Performance Food Group, Inc.:   5.500%, 6-1-24 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H) 1,785 Staples, Inc.:	,
Total Consumer Discretionary — 8.7% 77,510  Consumer Staples  Food Distributors — 0.4%  Performance Food Group, Inc.: 5.500%, 6-1-24 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559
Consumer Staples  Food Distributors — 0.4%  Performance Food Group, Inc.:  5.500%, 6-1-24 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	,
Consumer Staples  Food Distributors — 0.4%  Performance Food Group, Inc.:  5.500%, 6-1-24 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559
Food Distributors — 0.4%  Performance Food Group, Inc.: 5.500%, 6-1-24 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465
Performance Food Group, Inc.:       5.500%, 6-1-24 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465
5.500%, 6-1-24 (H) 2,754 2,823 5.500%, 10-15-27 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465 26,283
5.500%, 10-15-27 (H)	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465 26,283
· · · · · · · · · · · · · · · · · · ·	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465 26,283 77,510
3.341	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465 26,283 77,510
	Specialty Stores – 2.9% Party City Holdings, Inc., 6.625%, 8-1-26 (G)(H)	17,559 7,465 26,283 77,510

(Continued)	Principal	Value
Packaged Foods & Meats – 4.6%  JBS USA LLC and JBS USA Finance,		
Inc.: 5.875%, 7-15-24 (H)		\$ 5,873 4,813
Finance, Inc., 6.750%, 2-15-28 (H)	3,115	3,442
USA Finance, Inc. (GTD by JBS S.A.): 6.500%, 4-15-29 (H)	. 545	606
5.500%, 1-15-30 (H)	2,078	2,232
5.750%, 3-15-25 (H)	. 881 . 3,082	911 3,332
5.500%, 3-1-25 (H)	1,267	818 1,338 6,026
7.750%, 1-15-24 (H)		1,784 9,801
		40,976
Total Consumer Staples – 5.0%		44,317
Energy		
Oil & Gas Drilling — 0.9%  KCA Deutag UK Finance plc, 7.250%, 5-15-21 (H)  Offshore Drilling Holding S.A.,	5,209	3,542
8.375%, 9-20-20 (H)(J)	8,682	2,518
7.750%, 2-1-26	2,484	1,403 7,463
Oil & Gas Equipment & Services – 0.	3%	
Nine Energy Service, Inc., 8.750%, 11-1-23 (H)	1,917	1,553
SESI LLC, 7.125%, 12-15-21 (G)	906	772
		2,325
Oil & Gas Exploration & Production – Bellatrix Exploration Ltd., 8.500%, 9-11-23 (K)		1.040
Bellatrix Exploration Ltd. (3.000% Cash and 9.500% PIK),		1,048
9.500%, 12-15-23 (I)(K)	1,113	1,137
11.500%, 1-1-25		2,870
5.625%, 10-15-25 (H) Endeavor Energy Resources L.P.:		7,671
5.500%, 1-30-26 (H)		2,533 1,880
Extraction Oil & Gas, Inc., 5.625%, 2-1-26 (H)	3,647	2,188
6.250%, 3-15-23 (G)	821	770

CORPORATE DEBT SECURITIES (Continued)	Principal	Value
Oil & Gas Exploration & Production (	Continued)	
Sanchez Energy Corp., 7.250%, 2-15-23 (G)(H)(K)		
6.750%, 5-1-23 (H)	5,646 2,523	5,787 2,536
Ultra Resources, Inc. (9.000% Cash and 2.000% PIK), 11.000%, 7-12-24 (I)	1,016	163
		28,987
Oil & Gas Refining & Marketing – 1.6 Callon Petroleum Co. (GTD by Callon	%	20,307
Petroleum Operating Co.): 6.125%, 10-1-24	1,081 386	1,101 392
9.750%, 8-15-26	10,817	9,817
Acquisition Finance, Inc.: 9.375%, 5-1-24 (H)(K)	1,320 1,386 1,933	26 28 1,382
QEP Resources, Inc., 5.625%, 3-1-26 (G)	1,599	1,559
		14,305
Total Energy – 6.1%		53,080
Financials		
Consumer Finance – 0.3% CURO Group Holdings Corp., 8.250%, 9-1-25 (H)	2,815	2,477
Financial Exchanges & Data – 0.7% Refinitiv U.S. Holdings, Inc., 8.250%, 11-15-26 (H)	5,889	6,632
Insurance Brokers – 1.7% NFP Corp.:		
6.875%, 7-15-25 (H)	12,033 2,791	12,063 2,847
		14,910
Other Diversified Financial Services New Cotai LLC and New Cotai Capital Corp. (10.625% Cash or	- 1.3%	
10.625% PIK), 10.625%, 5-1-19 (H)(I)(K)	26,095	11,482
Property & Casualty Insurance – 1.39 Amwins Group, Inc.,	%	
7.750%, 7-1-26 (H)	5,966	6,593
7.000%, 5-1-26 (H)	4,731	5,003
		11,596
Specialized Finance – 1.5%		
BCPE Cycle Merger Sub II, Inc., 10.625%, 7-15-27 (H)	5,496	5,633

CORPORATE DEBT SECURITIES (Continued)	Principal	Value
Specialized Finance (Continued) Compass Group Diversified Holdings LLC.		
8.000%, 5-1-26 (H)	\$2,534	\$ 2,743
7.625%, 12-1-21 (H)	1,289	1,297
11.125%, 4-1-23 (H)	3,348	3,030
Thrifts & Mortgage Finance – 0.3% Provident Funding Associates L.P. and PFG Finance Corp., 6.375%, 6-15-25 (H)	2.943	2,884
	_,	
Total Financials – 7.1%		62,684
Health Care Health Care Facilities – 1.9% RegionalCare Hospital Partners Holdings, Inc. and Legend Merger Sub, Inc.,		
9.750%, 12-1-26 (H)	8,355	9,441
10.000%, 4-15-27 (H)	6,050	6,640
Health Care Services – 0.6% Heartland Dental LLC, 8.500%, 5-1-26 (H)	4,714	4,826
Health Care Technology – 1.2% Verscend Holding Corp., 9.750%, 8-15-26 (H)	9,366	10,244
$\label{eq:life-sciences} \mbox{Life Sciences Tools \& Services} - 0.9 \\ \mbox{Avantor, Inc.,}$		
9.000%, 10-1-25 (H)	6,976	7,796
Pharmaceuticals – 2.2% Advanz Pharma Corp., 8.000%, 9-6-24	430	405
Bausch Health Cos., Inc.: 6.125%, 4-15-25 (H)	1,727	1,784
9.000%, 12-15-25 (H)	855 2,515	972 2,889
8.500%, 1-31-27 (H)	3,270	3,724
7.750%, 5-15-22 (H)(I)	6,101	6,195
7.500%, 4-1-27 (H)	3,609	3,591
		19,560
Total Health Care – 6.8%		58,507
Aerospace & Defense – 5.5%		
TransDigm UK Holdings plc, 6.875%, 5-15-26	2,171	2,312

(Continued)	Principal	Value
Aerospace & Defense (Continued) TransDigm, Inc. (GTD by TransDigm Group, Inc.):		
6.500%, 7-15-24	\$ 6,077 1,162	\$ 6,268 1,208
6.250%, 3-15-26 (H)	3,744 2,490	4,053 2,641
7.500%, 3-15-27	2,673 6,936	2,924 7,014
8.500%, 11-15-24 (H)	7,697 11,228	7,967 11,761
13.125%, 11-15-27 (H)	2,259	2,321
Diversified Support Services – 0.4% Ahern Rentals, Inc.,		
7.375%, 5-15-23 (H)	3,901	3,092
5.875%, 9-15-26	472	506 3,598
Electrical Components & Equipment	- 0.1%	
Vertiv Group Corp., 9.250%, 10-15-24 (H)	844	907
Vertiv Intermediate Holding Corp. (12.000% Cash or 13.000% PIK),		
12.000%, 2-15-22 (H)(I)	393	408
Environmental & Facilities Services –	1.00/	1,313
GFL Environmental, Inc.:		2.002
5.375%, 3-1-23 (H)	2,809 3,835 952	2,893 4,052 1,047
Waste Pro USA, Inc., 5.500%, 2-15-26 (H)	482	502
		8,494
Research & Consulting Services – 0.3 Alliance Data Systems Corp.,	3%	
4.750%, 12-15-24 (H)	2,991	2,983
Security & Alarm Services – 0.8%  Prime Security Services Borrower  LLC and Prime Finance, Inc.,		
9.250%, 5-15-23 (H)	6,620	6,943
Total Industrials – 8.1%		71,802
Information Technology		
Application Software – 1.5% Kronos Acquisition Holdings, Inc., 9.000%, 8-15-23 (H)	13,902	13,276
Data Processing & Outsourced Service Italics Merger Sub, Inc.,	ces – 1.5%	
7.125%, 7-15-23 (H)	12,260	12,444

CORPORATE DEBT SECURITIES (Continued)	Principal	Value
Data Processing & Outsourced Servi j2 Cloud Services LLC and j2 Global, Inc.,	ces (Conti	nued)
6.000%, 7-15-25 (H)	\$ 1,192	\$ 1,264
		13,708
Electronic Equipment & Instruments NCR Corp.:	- 0.2%	
5.750%, 9-1-27 (H)	966 966	1,029 1,048
0.12070, 3 1 20 (11)	300	2,077
IT Consulting & Other Services — 1.0' Cardtronics, Inc. and Cardtronics	%	
USA, Inc., 5.500%, 5-1-25 (H)	687	713
6.375%, 12-15-23	4,266	4,373
9.000%, 11-1-22 (H)	3,739	3,907
		8,993
Total Information Technology – 4.29	6	38,054
Materials		
Aluminum – 1.0%  Constellium N.V.: 5.750%, 5-15-24 (H)		3,649 2,455 1,543 1,048 8,695
Commodity Chemicals — 0.5% NOVA Chemicals Corp.: 4.875%, 6-1-24 (H)	2,943 1,177	3,039 1,209 4,248
Construction Materials — 0.6% Hillman Group, Inc. (The), 6.375%, 7-15-22 (H)	5,883	5,471
Fertilizers & Agricultural Chemicals - Pinnacle Operating Corp., 9.000%, 5-15-23 (B)(H)		2,640
Metal & Glass Containers — 0.3% ARD Finance S.A. (6.500% Cash or 7.250% PIK), 6.500%, 6-30-27 (H)(I)	2,110	2,182

CORPORATE DEBT SECURITIES (Continued) Principa	Value
Metal & Glass Containers (Continued) HudBay Minerals, Inc.:	
7.250%, 1-15-23 (H) \$ 408	\$ 423
7.625%, 1-15-25 (H) 611	645
	3,250
Total Materials – 2.7%	24,304
TOTAL CORPORATE DEBT SECURITIES – 63.3%	\$560,470
(Cost: \$581,094)	
LOANS (L)	
Communication Services	
Advertising – 0.4%  Advantage Sales & Marketing, Inc. (ICE LIBOR plus 325 bps), 5.049%, 7-25-21	762
(ICE LIBOR plus 650 bps), 8.299%, 7-25-22 2,951	2,606
_,	3,368
Broadcasting – 0.8% Clear Channel Outdoor Holdings, Inc. (ICE LIBOR plus 350 bps), 5.299%, 8-1-26	6,628
Integrated Telecommunication Services – 1. West Corp. (3-Month ICE LIBOR plus 400 bps),	170
5.927%, 10-10-24	9,255
Publishing – 0.1% Recorded Books, Inc. (ICE LIBOR plus 450 bps),	
6.299%, 8-31-25 (B) 1,130	1,132
Wireless Telecommunication Service – 0.1% Digicel International Finance Ltd. (ICE LIBOR plus 325 bps),	
5.340%, 5-27-24 1,394	1,240
Total Communication Services – 2.5%	21,623
Consumer Discretionary	
Apparel Retail – 0.6% Talbots, Inc. (The) (ICE LIBOR plus 700 bps),	
8.799%, 11-28-22 (B) 4,483 TRLG Intermediate Holdings LLC,	4,371
10.000%, 10-27-22 1,521	1,435
	5,806
Department Stores – 0.2%	

LOANS (L) (Continued)	Principal	Value
Housewares & Specialties – 0.3% KIK Custom Products, Inc. (ICE LIBOR plus 400 bps),		
5.792%, 5-15-23	\$2,573	\$ 2,521
Restaurants – 0.4% CEC Entertainment, Inc. (ICE LIBOR plus 650 bps),		
8.299%, 8-30-26	3,444	3,299
9.427%, 4-18-25	3,326	339
Specialized Consumer Services – 0.2 Asurion LLC (ICE LIBOR plus	2%	
600 bps), 8.299%, 8-4-25	1,861	1,883
Specialty Stores – 1.1%  Jo-Ann Stores, Inc. (ICE LIBOR plus 500 bps).		
6.934%, 10-16-23	3,273	2,268
11.042%, 5-21-24	3,971	1,363
500 bps), 6.691%, 4-12-26	6,061	5,949
T 0.50/		9,580
Textiles – 0.5% SIWF Holdings, Inc. (ICE LIBOR plus 425 bps),		
6.049%, 6-15-25	4,219	4,198
Total Consumer Discretionary – 3.3%	ó	29,148
Consumer Staples		
Packaged Foods & Meats – 0.3% Bellring Brands LLC (ICE LIBOR plus		
500 bps), 6.799%, 10-21-24	2,762	2,788
Total Consumer Staples – 0.3%		2,788
Energy		
Coal & Consumable Fuels – 0.6% Foresight Energy LLC (ICE LIBOR		
plus 725 bps), 7.659%, 3-28-22	6,950	2,964
plus 650 bps), 10.150%, 3-15-22 (B)	595	592
(15.000% Cash or 15.000% PIK), 15.000%, 3-15-29 (I)	1,870	1,440
		4,996

LOANS (L) (Continued)	Principal	Value
Oil & Gas Equipment & Services – 0. Larchmont Resources LLC (8.890%	1%	
Cash or 8.890% PIK), 8.890%, 8-7-20 (B)(E)(I)	\$ 757	\$ 697
Oil & Gas Exploration & Production – California Resources Corp. (ICE	0.4%	
LIBOR plus 1,037.50 bps), 12.180%, 12-31-21	2,885	2,140
6.555%, 12-31-22	1,928	1,718
Oil & Gas Storage & Transportation – Bowie Resources Holdings LLC (ICE	- 1.2%	
LIBOR plus 1,075 bps), 12.659%, 2-16-21	1,911	1,791
7.659%, 8-12-20	2,748	2,673
plus 500 bps), 7.040%, 3-1-26	6,000	5,745
LIBOR plus 400 bps), 5.799%, 5-22-26	681	672
		10,881
Total Energy – 2.3%		20,432
		,
Financials		
Asset Management & Custody Banks Edelman Financial Holdings II, Inc.	s – 0.4%	
Asset Management & Custody Banks	4,048	4,028
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26		· ·
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26		· ·
Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26	4,048 3,350	4,028
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26 Financial Exchanges & Data — 0.4% Hudson River Trading LLC (3-Month U.S. LIBOR plus 350 bps), 5.299%, 4-3-25 (B) Insurance Brokers — 0.3% NFP Corp. (ICE LIBOR plus 300 bps), 4.799%, 1-8-24	4,048 3,350 2,499	4,028
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26 Financial Exchanges & Data — 0.4% Hudson River Trading LLC (3-Month U.S. LIBOR plus 350 bps), 5.299%, 4-3-25 (B) Insurance Brokers — 0.3% NFP Corp. (ICE LIBOR plus 300 bps), 4.799%, 1-8-24 Investment Banking & Brokerage — 0 Jane Street Group LLC (ICE LIBOR	4,048 3,350 2,499	4,028
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26	4,048 3,350 2,499	4,028
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26  Financial Exchanges & Data — 0.4% Hudson River Trading LLC (3-Month U.S. LIBOR plus 350 bps), 5.299%, 4-3-25 (B)  Insurance Brokers — 0.3% NFP Corp. (ICE LIBOR plus 300 bps), 4.799%, 1-8-24  Investment Banking & Brokerage — 0 Jane Street Group LLC (ICE LIBOR plus 300 bps), 4.799%, 8-25-22  Other Diversified Financial Services -	4,048 3,350 2,499 0.6% 5,020	4,028 3,367 2,486
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26  Financial Exchanges & Data — 0.4% Hudson River Trading LLC (3-Month U.S. LIBOR plus 350 bps), 5.299%, 4-3-25 (B)  Insurance Brokers — 0.3% NFP Corp. (ICE LIBOR plus 300 bps), 4.799%, 1-8-24  Investment Banking & Brokerage — 0 Jane Street Group LLC (ICE LIBOR plus 300 bps), 4.799%, 8-25-22  Other Diversified Financial Services - New Cotai LLC, 0.000%, 7-20-20 (M)  New Cotai LLC (1-Month U.S. LIBOR	4,048 3,350 2,499 0.6% 5,020	4,028 3,367 2,486
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26 Financial Exchanges & Data — 0.4% Hudson River Trading LLC (3-Month U.S. LIBOR plus 350 bps), 5.299%, 4-3-25 (B) Insurance Brokers — 0.3% NFP Corp. (ICE LIBOR plus 300 bps), 4.799%, 1-8-24 Investment Banking & Brokerage — 0 Jane Street Group LLC (ICE LIBOR plus 300 bps), 4.799%, 8-25-22 Other Diversified Financial Services New Cotai LLC, 0.000%, 7-20-20 (M)	4,048 3,350 2,499 0.6% 5,020 - 0.0%	4,028 3,367 2,486 5,008
Asset Management & Custody Banks Edelman Financial Holdings II, Inc. (ICE LIBOR plus 675 bps), 8.535%, 7-20-26  Financial Exchanges & Data — 0.4% Hudson River Trading LLC (3-Month U.S. LIBOR plus 350 bps), 5.299%, 4-3-25 (B)  Insurance Brokers — 0.3% NFP Corp. (ICE LIBOR plus 300 bps), 4.799%, 1-8-24  Investment Banking & Brokerage — 0 Jane Street Group LLC (ICE LIBOR plus 300 bps), 4.799%, 8-25-22  Other Diversified Financial Services - New Cotal LLC, 0.000%, 7-20-20 (M)  New Cotal LLC (1-Month U.S. LIBOR plus 25 bps): 2.965%, 7-20-20	4,048 3,350 2,499 0.6% 5,020 - 0.0% 44	4,028 3,367 2,486 5,008

LOANS (L) (Continued)	Principal	Value
Property & Casualty Insurance – 1.2 Amynta Agency Borrower, Inc. (ICE LIBOR plus 400 bps),		
6.299%, 2-28-25(B)	. \$ 8,373	\$ 7,787
10.299%, 2-28-26	. 2,807	2,821
Specialized Finance – 0.5% Gulf Finance LLC (ICE LIBOR plus 525 bps):		
6.950%, 8-25-23		2,969 1,772
		4,741
Total Financials—3.4%		30,425
Health Care		
Health Care Equipment – 0.1% LifeScan Global Corp. (3-Month ICE LIBOR plus 950 bps),		
11.556%, 10-1-25	. 632	543
Health Care Facilities – 1.5% Gentiva Health Services, Inc. (3-Month ICE LIBOR plus 375 bps),		
5.563%, 7-2-25	. 7,322	7,355
6.202%, 11-16-25	. 6,406	6,452
Health Care Services – 1.6% Heartland Dental LLC,		
0.000%, 4-30-25 (M)	. 90	89
5.549%, 4-30-25	. 3,986	3,961
LIBOR plus 500 bps), 6.813%, 6-26-26	. 10,964	10,854
		14,904
Health Care Technology – 1.0% Verscend Holding Corp. (ICE LIBOR plus 450 bps),		
6.299%, 8-27-25	. 8,917	8,969
Pharmaceuticals – 0.1% Concordia International Corp. (ICE LIBOR plus 550 bps),		
7.447%, 9-6-24	. 1,158	1,080
Total Health Care – 4.3%		39,303

Construction & Engineering — 0.8% McDermott Technology (Americas), Inc. (ICE LIBOR plus 500 bps), 6.945%, 5-10-25	LOANS (L) (Continued)	Principal	Value
Hampton Rubber Co. & SEI Holding Corp. (ICE LIBOR plus 800 bps), 9.799%, 3-27-22	Industrials		
McDermott Technology (Americas), Inc. (ICE LIBOR plus 500 bps), 6.945%, 5-10-25	Hampton Rubber Co. & SEI Holding Corp. (ICE LIBOR plus 800 bps),	. \$ 1,074	\$ 1,052
0.000%, 10-21-21 (M)	McDermott Technology (Americas), Inc. (ICE LIBOR plus 500 bps), 6.945%, 5-10-25		3,220
11.900%, 10-21-21	0.000%, 10-21-21 (M) McDermott Technology Americas,	. 1,483	1,511
10.445%, 7-10-22 (B)	11.900%, 10-21-21	. 407 . 896	415 912
Creative Artists Agency LLC (ICE LIBOR plus 375 bps), 5.549%, 11-26-26	1 1 1/	. 1,119	896 6,954
PAE Holding Corp. (ICE LIBOR plus 550 bps), 7.349%, 10-20-22	Creative Artists Agency LLC (ICE LIBOR plus 375 bps),		1,042
PAE Holding Corp. (ICE LIBOR plus 950 bps), 11.349%, 10-20-23	PAE Holding Corp. (ICE LIBOR plus 550 bps),	4.000	4.000
11.349%, 10-20-23	PAE Holding Corp. (ICE LIBOR plus	. 4,968	4,968
Industrial Machinery	* **	. 798	783 
Form Technologies LLC (ICE LIBOR plus 325 bps), 5.195%, 1-28-22 (B)	Dynacast International LLC (ICE LIBOR plus 850 bps),		
5.195%, 1-28-22 (B)	Form Technologies LLC (ICE LIBOR	. 13,354	12,586
Information Technology  Application Software – 0.3%  Applied Systems, Inc. (ICE LIBOR plus 700 bps), 8.945%, 9-19-25		. 1,680	1,630
Application Software — 0.3%  Applied Systems, Inc. (ICE LIBOR plus 700 bps), 8.945%, 9-19-25 1,954  Kronos Acquisition Holdings, Inc. (ICE LIBOR plus 700 bps), 8.799%, 5-15-23 (B)	Total Industrials – 3.3%		29,015
Applied Systems, Inc. (ICE LIBOR plus 700 bps), 8.945%, 9-19-25	Information Technology		
8.945%, 9-19-25	Applied Systems, Inc. (ICE LIBOR		
8.799%, 5-15-23 (B)	8.945%, 9-19-25 Kronos Acquisition Holdings, Inc.	. 1,954	1,987
Communications Equipment – 0.9% MLN U.S. Holdco LLC (ICE LIBOR plus 450 bps),		. 531	523
MLN U.S. Holdco LLC (ICE LIBOR plus 450 bps),			2,510
· · · · · · · · · · · · · · · · · · ·	MLN U.S. Holdco LLC (ICE LIBOR	, 5	
		. 5,814	5,479

LOANS (L) (Continued)	Principal	Value
Communications Equipment (Conti MLN U.S. Holdco LLC (ICE LIBOR plus 875 bps),	nued)	
10.441%, 11-30-26	\$ 2,920	\$ 2,16
		7,640
Data Processing & Outsourced Ser CommerceHub, Inc. (ICE LIBOR plus 375 bps),	vices – 1.0	%
5.299%, 5-21-25	3,145	3,074
0.000%, 5-1-25 (M)	702	423
8.990%, 5-1-25	2,727	1,642
4.740%, 5-1-24	3,359	2,954
		8,093
Total Information Technology – 2.2	2%	18,243
Materials		,
Construction Materials — 0.5% Hillman Group, Inc. (The) (ICE LIBOR plus 350 bps),		
		4 2 2
5.799%, 5-31-25	4,298	4,22
5.799%, 5-31-25	4,298	
	. 4,298	4,22
Total Materials – 0.5%	4,298	4,22
Total Materials – 0.5%  TOTAL LOANS – 22.1%	4,298 Shares	4,22
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)		4,22
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (0) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market	Shares	4,22
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (O) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)	Shares 2,193	4,22° \$ 195,198 2,193
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (O) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class,	Shares 2,193	4,22 \$ 195,198 2,193 69,394
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (0) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%	Shares 2,193	4,22 \$ 195,198 2,193 69,394
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (O) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class,	Shares 2,193	4,22 \$ 195,198 2,193 69,394 71,583
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (0) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%  TOTAL SHORT-TERM	Shares 2,193	4,22 \$ 195,198 2,193 69,394 71,583
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (O) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%  TOTAL SHORT-TERM SECURITIES – 8.1%	Shares 2,193	4,22 \$ 195,198 2,193 69,394 71,583
Total Materials – 0.5%  TOTAL LOANS – 22.1%  (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (0) – 8.1%  Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%  TOTAL SHORT-TERM SECURITIES – 8.1%  (Cost: \$71,587)  TOTAL INVESTMENT	Shares 2,193	4,22 \$ 195,198 2,193 69,394 71,583 \$ 71,583
Total Materials – 0.5%  TOTAL LOANS – 22.1% (Cost: \$215,920)  SHORT-TERM SECURITIES  Money Market Funds (O) – 8.1% Dreyfus Institutional Preferred Government Money Market Fund – Institutional Shares, 1.550%, (N)  State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%  TOTAL SHORT-TERM SECURITIES – 8.1% (Cost: \$71,587)  TOTAL INVESTMENT SECURITIES – 99.0%	Shares 2,193 69,394	4,22 \$ 195,198 2,193 69,394 71,583 \$ 71,583

#### Notes to Schedule of Investments

\*Not shown due to rounding.

(A)No dividends were paid during the preceding 12 months.

(B)Securities whose value was determined using significant unobservable inputs.

(C)Restricted securities. At December 31, 2019, the Portfolio owned the following restricted securities:

rity Acquisition Da		Shares	Cost	Value
BIS Industries Ltd.	12-22-17	1,605	\$ 151	\$ 79
Larchmont Resources LLC	12-8-16	1	340	252
New Cotai Participation Corp., Class B	4-12-13	_*	62	_
Sabine Oil & Gas Corp.	12-7-16	_*	11	19
Pinnacle Agriculture Enterprises LLC	3-10-17	4,583	2,083	_*
Targa Resources Corp., 9.500%	10-24-17	8	8,416	8,211
			\$11.063	\$8.561

The total value of these securities represented 1.0% of net assets at December 31, 2019.

(D)Listed on an exchange outside the United States.

(E)Deemed to be an affiliate due to the Portfolio owning at least 5% of the voting securities.

(F)Warrants entitle the Portfolio to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.

(G)All or a portion of securities with an aggregate value of \$1,918 are on loan.

(H)Securities were purchased pursuant to an exemption from registration available under Rule 144A under the Securities Act of 1933 and may only be resold in transactions exempt from registration, normally to qualified institutional buyers. At December 31, 2019 the total value of these securities amounted to \$500,158 or 56.4% of net assets.

(I)Payment-in-kind bond which may pay interest in additional par and/or in cash. Rates shown are the current rate and possible payment rates.

(J)Step bond that pays an initial coupon rate for the first period and then a higher or lower coupon rate for the following periods. Interest rate disclosed is that which is in effect at December 31, 2019.

(K)Non-income producing as the issuer has either missed its most recent interest payment or declared bankruptcy.

(L)Variable rate security. Interest rate disclosed is that which is in effect at December 31, 2019. Description of the reference rate and spread, if applicable, are included in the

(M)All or a portion of this position has not settled. Full contract rates do not take effect until settlement date.

(N)Investment made with cash collateral received from securities on loan.

(O)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Le	vel 3
Assets				
Investments in Securities				
Common Stocks				
Consumer Discretionary	\$ 14,657	\$ -	\$	_*
Energy	14	344		271
Health Care	96	_		_
Industrials	_	_		79
Total Common Stocks	\$ 14,767	\$ 344	\$	350
Investment Funds	25,503	_		_
Preferred Stocks	_	8,211		_*
Warrants	_	1		_
Corporate Debt Securities	_	557,830		2,640
Loans	_	174,203	20	0,995
Short-Term Securities	71,587	_		_
Total	\$ 111,857	\$740,589	\$2	3,985

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

	Common Stocks	Preferred Stocks	Corporate Debt Securities	Loans
Beginning Balance 1-1-19	\$ 4,144	\$ 410	\$ -	\$50,874
Net realized gain (loss)	434	_	_	29
Net change in unrealized appreciation (depreciation)	(1,260)	(410)	(1,650)	(492)
Purchases	664	_	_	2,820
Sales	(3,644)	_	_	(6,725)
Amortization/Accretion of premium/discount	_	_	_	53
Transfers into Level 3 during the period	12	_	4,290	10,137
Transfers out of Level 3 during the period				(35,701)
Ending Balance 12-31-19	\$ 350	\$ -*	\$2,640	\$20,995
Net change in unrealized appreciation (depreciation) for all Level 3 investments still held as of 12-31-19	\$ (826)	\$(410)	\$(1,650)	\$ (492)

Transfers from Level 2 to Level 3 occurred primarily due to the lack of observable market data due to decreased market activity or information for these securities. Transfers from Level 3 to Level 2 occurred primarily due to the increased availability of observable market data due to increased market activity or information.

Information about Level 3 fair value investments:

	Fair Value at 12-31-19	Valuation Technique(s)	Unobservable Input(s)	Input value(s)
Assets				
Common Stocks	\$ 79	Market approach	Adjusted EBITDA multiple	6.20x
	271	Third-party valuation service	Broker quotes	N/A
	_*	Net asset approach	Adjusted book value	1.00x
Preferred Stocks	_*	Transaction	Price	\$0
Corporate Debt Securities	2,640	Transaction	Price	\$40
Loans	20,995	Third-party valuation service	Broker quotes	N/A

Significant increases (decreases) in the adjusted EBITDA multiple inputs as of the reporting date would result in a higher (lower) fair value measurement.

The following acronyms are used throughout this schedule:

ETF = Exchange Traded Fund

GTD = Guaranteed

ICE = Intercontinental Exchange

PIK = Payment In Kind

LIBOR = London Interbank Offered Rate

See Accompanying Notes to Financial Statements.

(UNAUDITED)



John C Maywell



Catherine L. Murray

Below, John Maxwell, CFA, and Catherine Murray, portfolio managers of Ivy VIP International Core Equity, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Maxwell has managed the Portfolio since May 2009 and has 28 years of industry experience. Ms. Murray was named co-portfolio manager in January 2017 and was previously an assistant portfolio manager on the Portfolio since 2014. She has 29 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP International Core Equity (Class II shares at net asset value)	18.69%
Benchmark and Morningstar Category	
MSCI EAFE Index (generally reflects the performance of securities in Europe, Australasia and the Far East)	22.01%
Morningstar Foreign Large Blend Category Average (generally reflects the performance of the universe of funds with similar investment objectives)	

Please note that the Portfolio returns include applicable fees and expenses, whereas the index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

#### International markets stage a recovery

The MSCI EAFE Index, the Portfolio's benchmark, was up 22% in 2019 as the anticipation of relief from geopolitical overhangs was enough to boost sentiment in developed international equities. We believe market gains did not fully reflect the volatility of events that took place during the fiscal year. The U.S.-China trade war was met with many hurdles, delays and unexpected turns which resulted in damage to corporate confidence across the globe. Companies paused investment and slowed inventory procurement, all impacting manufacturing in key international economies. The year had several economic setbacks and murky visibility. But relatively cheap equity valuations to start the year, expansionary monetary policy and signs of economic bottoming coincided with enough progress toward a phase 1 trade deal between the U.S. and China that confidence overcame fear.

The U.S. Federal Reserve (Fed) had an about face with its 2019 approach toward interest rate policy. After taking a hawkish tone through 2018, the Fed cut 75 basis points during the year in an effort to provide "insurance" to the market. With the Fed accommodating, central banks around the world followed easy policy. In China, a combination of monetary and fiscal measures, including a significant income tax break, helped boost a faltering consumer base. This boost helped the country maintain a reasonably high growth rate.

The U.S. dollar appreciated against the euro and British pound for the first half of 2019 before reversing to erase all gains to close the year. The opposite trend took place for the yen, where global fear in the first half of the year drew money to the safe-haven currency before it rushed out as fear subsided. Oil was volatile throughout the year as oversupply in the beginning of 2019 was met with several geopolitical events and supply cuts from OPEC. In September, oil fields in Saudi Arabia were bombed and escalation in the Middle East to end the year were major events that demonstrated how fragile one of the world's major sources of oil can be.

#### Portfolio review

For the fiscal year ended Dec. 31, 2019, the Portfolio underperformed its benchmark and Morningstar peer group. In 2019, markets were dominated by growth companies, an environment not favorable for the strategy, which uses a relative value approach. Throughout the year, the Portfolio was positioned with a slightly defensive posture. An above historical average cash balance, selective currency contracts and hedges as well as undervalued companies that, we believed, were positioned to go down less than the market all offset market risk. Although, we did not anticipate the market would shrug off risks in the manner it did. The Portfolio did perform well within periods of market stress; however, those periods were short-lived. Overall, the rally was primarily led by, what we believe are, overvalued growth companies.

During the year, poor stock selection in the financials, information technology and communication services sectors were top relative detractors to performance. Additionally, the Portfolio's overweight allocation to the poor performing energy sector as well as a relatively large cash allocation in a strong market contributed to the underperformance. Specifically, positions in Swedbank AB, a Swedish bank; Isuzu Motors Ltd., a Japanese truck company; and BT Group plc, a British telecommunications company were the worst relative performing stocks for the fiscal year. Contributing to performance

was strong stock selection in industrials and consumer staples. In particular, positions in Wuliangye Yibin Co. Ltd., A Shares, a Chinese spirits business; Airbus SE, a French aerospace company; and CRH plc, a U.K.-based building materials company, all helped performance. The Portfolio no longer holds BT Group plc or Wuliangye Yibin Co. Ltd.

From a country standpoint, stock selection in China was the largest relative contributor, while stock selection in France and Sweden dragged on performance. An overweight allocation to Canada was also a detractor.

# Actions in the Portfolio during the year

To start the fiscal year, the Portfolio transitioned to a more defensive posture through increasing cash and selling several positions highly levered to global trade. The threat of an escalating trade war and clear stress on global trade led the team to believe certain companies would be at risk. As the year progressed, new threats began to rise. The U.S. discussed limiting U.S. pension access to Chinese equities and stopping Chinese companies from listing on U.S. exchanges. This opened up the potential for a new set of rules that led the Portfolio to slightly lower direct China holdings and instead gain exposure through global companies with significant exposure to the Chinese consumer.

Throughout most of the year, the strategy maintained an above average cash position, a long Japanese yen position and had China exposure fully hedged to currency risk. Toward the end of the year as several of the risk factors began to abate, the cash level was lowered and the currency hedge to the Chinese yuan was exited.

#### Current Portfolio themes are:

- · Disproportionate growth of emerging-market consumers, particularly in the Asia-Pacific region
- · Strong growth in infrastructure
- · Solid and believable dividend yields
- · Forces of market disruption

#### What we seek

As we move forward, we continue to seek companies we believe are underpriced relative to their prospects and peers in both the growth and value parts of the market. We are seeking less economically sensitive and less leveraged stocks in both the cyclical and defensive parts of the market. With disruptive forces that seem more concentrated in the defensive part of the market, the Portfolio's defensive/cyclical weighting is balanced. We are also increasingly focused on companies with sustainable competitive advantages or improving industry dynamics that are not appreciated by the market — a strategy we believe to be effective at the end of an economic cycle.

#### Outlook

The outset of 2020 has several conflicting circumstances to consider. Global growth is still fragile. Manufacturing and industrial production has been weak and the lasting impacts of trade disputes on capital investment and business confidence is still unknown. The consumer has rescued and supported economic growth across much of the world, a source of growth that may not be sustainable. Tensions in the Middle East are boiling, which could continue to drive oil prices to levels that hurt consumers and major oil importing nations around the world. It may also carry with it a risk premium that discounts current market valuations.

On the positive side, there are signs of cyclical bottoming across Europe and Asia. If these economies can sustain improvements in key economic growth drivers, this would be positive for the global economy. We believe a U.S.-China trade deal expected to be signed in January should bring confidence to industries that had previously experienced significant trade-related slowdowns. Lastly, Brexit is several steps closer toward an orderly conclusion. There are still variables that could derail this soft exit, but the situation has improved which should support improvements in the U.K. and Europe.

Looking forward, we believe 2020 should prove to be an eventful year. Geopolitics will likely continue to be an unrelenting driver of asset values across the globe. An election year in the U.S. will bring a new slate of risks to consider. And tensions in the Middle East could bring market shocks. At the same time, the positive factors mentioned above could bring another year of positive returns, particularly in international markets.

We continue to believe there is opportunity in developed international markets. We believe valuations remain attractive, particularly in the companies we own, and growth prospects are brightening. The relative value approach the Portfolio employs led us to be underexposed to many of the large gainers in the international universe in 2019; however, we are confident the value discrepancies in the stocks we own are temporary.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

International investing involves additional risks, including currency fluctuations, political or economic conditions affecting the foreign country, and differences in accounting standards and foreign regulations. Investments in countries with emerging economies or securities markets may carry greater risk than investments in more developed countries. Political and economic structures in many such countries may be undergoing significant evolution and rapid development, and such countries may lack the social, political and economic stability characteristics of more developed countries. Investments in securities issued in these countries may be more volatile and less liquid than securities issued in more developed countries. The use of derivatives presents several risks, including the risk that these instruments may change in value in a manner that adversely affects the Portfolio's value and the risk that fluctuations in the value of the derivatives may not correlate with the corresponding securities or fixed income markets or the underlying asset upon which the derivative's value is based. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged, and includes reinvested dividends and does not include fees. One cannot invest directly in an index, nor is an index representative of Ivy VIP International Core Equity.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	95.7%
Financials	13.8%
Industrials	13.4%
Health Care	13.2%
Consumer Discretionary	13.1%
Consumer Staples	11.6%
Energy	9.9%
Materials	7.4%
Information Technology	6.7%
Communication Services	3.0%
Utilities	2.2%
Real Estate	1.4%
Bonds	0.3%
Other Government Securities	0.3%
Cash and Other Assets (Net of Liabilities), and Cash	
Equivalents+	4.0%

# **Country Weightings**

Europe	63.2%
France	13.6%
United Kingdom	12.5%
Germany	12.3%
Switzerland	8.9%
Netherlands	4.1%
Other Europe	11.8%
Pacific Basin	26.9%
Japan	12.8%
China	5.3%
Other Pacific Basin	8.8%
North America	5.9%
Canada	4.5%
Other North America	1.4%
Cash and Other Assets (Net of Liabilities), and Cash Equivalents+	4.0%

# **Top 10 Equity Holdings**

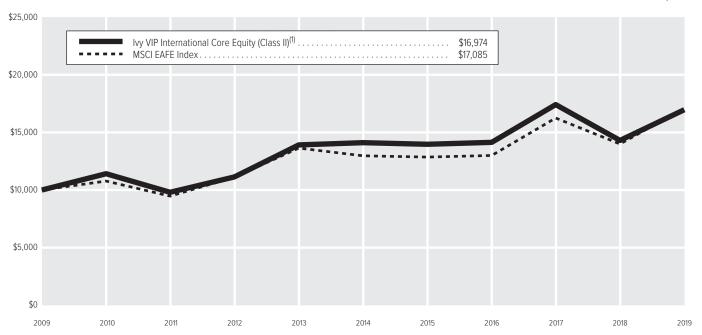
Company	Country	Sector	Industry
Total S.A.	France	Energy	Integrated Oil & Gas
Nestle S.A., Registered Shares	Switzerland	Consumer Staples	Packaged Foods & Meats
Airbus SE	France	Industrials	Aerospace & Defense
SAP AG	Germany	Information Technology	Application Software
Roche Holdings AG, Genusscheine	Switzerland	Health Care	Pharmaceuticals
Subaru Corp.	Japan	Consumer Discretionary	Automobile Manufacturers
UniCredit S.p.A.	Italy	Financials	Diversified Banks
Bayer AG	Germany	Health Care	Pharmaceuticals
Seven & i Holdings Co. Ltd.	Japan	Consumer Staples	Food Retail
Merck KGaA	Germany	Health Care	Pharmaceuticals

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

+Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# **COMPARISON OF CHANGE IN VALUE OF \$10,000 INVESTMENT**

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class II
1-year period ended 12-31-19	18.69%
5-year period ended 12-31-19	3.77%
10-year period ended 12-31-19	5.43%

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Australia		
Materials — 3.2% BHP Group plc	347 113 406	\$ 8,172 5,315 8,619 22,106
Total Australia – 3.2%		\$22,106
Canada		
Consumer Discretionary – 1.1% Dollarama, Inc	220	7,578
Energy – 3.4% Canadian Natural Resources Ltd Seven Generations Energy Ltd.,	281	9,075
Class A (A)	1,027 234	6,698 7,675
		23,448
Total Canada – 4.5%		\$31,026
China		
Consumer Discretionary – 2.0% Alibaba Group Holding Ltd. ADR (A)(B)	40	8,452
Gree Electric Appliances, Inc. of Zhuhai, A Shares	591	5,571
Zhanai, ri Gharco	001	14,023
Consumer Staples – 1.0%		
Wens Foodstuffs Group Co. Ltd., Class A	1,464	7,064
Financials – 1.2%		
China Construction Bank Corp	9,645	8,330
Health Care – 1.1% Yunnan Baiyao Group Co. Ltd., A Shares	567	7,287
Total China – 5.3%		\$36,704
Denmark		400,701
Industrials – 1.3% A.P. Moller – Maersk A/S A.P. Moller – Maersk A/S, Class A	5 2	6,686 2,135 8,821
Total Denmark – 1.3%		\$ 8,821
Finland		
Information Technology – 0.8%  Nokia Corp., Series A ADR  Nokia OYJ	722 720	2,680 2,668
	.20	5,348
Total Finland – 0.8%		\$ 5,348

COMMON STOCKS (Continued)	Shares	Value
France		
Communication Services – 2.2%		
Orange S.A	741 57	\$ 10,912
ODISOIT EIITEITAIIIIIIEIIT S.A. (A)	3/	3,919
		14,831
Consumer Staples – 1.3%		
Pernod Ricard S.A	51	9,149
Energy – 2.8%		
Total S.A	360	19,872
F: 4 F0/		
Financials – 1.5% BNP Paribas S.A.	170	10,054
BIT Turbus S.A.	170	
Industrials – 3.9%		
Airbus SE	114 100	16,738 10,306
Schlieder Electric S.A	100	
		27,044
Information Technology – 0.8%		
Cap Gemini S.A	48	5,854
Utilities – 1.1%		
ENGIE	472	7,631
Total France – 13.6%		\$94,435
Germany		
Consumer Discretionary – 1.2%		
Continental AG	66	8,437
Consumer Staples – 1.1%		
Beiersdorf Aktiengesellschaft	65	7,757
Financials – 0.6% Commerzbank AG	676	4,128
Commerzbank AO	070	4,120
Health Care – 4.7%		
Bayer AG	150	12,138
KGaA	134	9,832
Merck KGaA	97	11,458
		33,428
Information Tochnology 2 29/		
Information Technology – 2.2% SAP AG	118	15,760
Real Estate – 1.4%	0.40	0.074
Deutsche Wohnen AG	242	9,874
Utilities – 1.1%		
E.ON AG	709	7,542
Total Germany – 12.3%		\$86,926
Hong Kong		
Financials – 1.5%		
Hong Kong Exchanges and Clearing	224	40 700
Ltd	331	10,763
Total Hong Kong – 1.5%		\$ 10,763

	DECEN	IDER 31, Z
COMMON STOCKS (Continued)	Shares	Value
India		
Financials – 2.1%  Axis Bank Ltd.  Housing Development Finance Corp.	744	\$ 7,860
Ltd	206	6,971
		14,831
Total India – 2.1%		\$ 14,831
Ireland		
Materials – 1.3% CRH plc	222	8,931
Total Ireland – 1.3%		\$ 8,931
Italy		
Financials – 1.8%		
UniCredit S.p.A	862	12,572
Total Italy – 1.8%		\$ 12,572
Japan		
Consumer Discretionary – 5.4% Isuzu Motors Ltd	782 549 177 396	9,226 13,576 7,375 7,558 37,735
Consumer Staples – 1.7% Seven & i Holdings Co. Ltd	320	11,729
Energy – 1.2% Inpex Corp.	836	8,605
Financials – 2.4%  ORIX Corp	459 163	7,583 9,132 16,715
Industrials – 2.1%		
SMC Corp	23 94	10,670 3,872
тальн объргания		14,542
Total Japan – 12.8%		\$89,326
Luxembourg		
Energy – 1.1% Tenaris S.A	335 166	3,802 3,749 
T		
Total Luxembourg – 1.1%		\$ 7,551
Netherlands		
Consumer Discretionary – 1.2% Prosus N.V. (A)	116	8,654

COMMON STOCKS (Continued)	Shares	Value
Health Care — 0.5% Qiagen N.V. (A)	108	\$ 3,680
Industrials – 2.4% Koninklijke Philips Electronics N.V.,		
Ordinary Shares	164 154	8,005 9,425
		17,430
Total Netherlands – 4.1%		\$29,76
Norway		
Communication Services – 0.3% Telenor ASA	113	2,026
Consumer Staples – 1.1% Mowi ASA	289	7,51
Figure 1 and		
Financials – 1.2% DNB ASA	456	8,53
Total Norway – 2.6%		\$18,073
Singapore		
Communication Services – 0.5% Singapore Telecommunications Ltd	1,534	3,849
Total Singapore – 0.5%		\$ 3,849
South Korea		
Information Technology – 1.5% Samsung Electronics Co. Ltd	220	10,54
Total South Korea – 1.5%		\$ 10,54
Spain		
Consumer Discretionary — 1.1% Industria de Diseno Textil S.A	214	7,53
Total Spain — 1.1%		\$ 7,53
Sweden		
Financials – 1.5% Swedbank AB	713	10,583
Total Sweden – 1.5%		\$10,583
Switzerland		
Consumer Staples – 2.7% Nestle S.A., Registered Shares	173	18,67
Health Care – 3.1%		
Alcon, Inc. (A)	136	7,67
Roche Holdings AG, Genusscheine	42	13,789
Industrials – 1.6% Ferguson plc	121	11,022

COMMON STOCKS (Continued)	Shares		Value
Materials – 1.5% Glencore International plc	3,414	\$	10,644
Total Switzerland – 8.9%		\$	61,800
United Kingdom			
Consumer Discretionary – 1.1%			
Whitbread plc	117		7,500
Consumer Staples – 2.7%			
British American Tobacco plc	260		11,119
Imperial Tobacco Group plc	325	_	8,040
		_	19,159
Energy – 1.4%			
BP plc	1,046		6,536
BP plc ADR	83		3,151
			9,687
Health Care – 3.8%			
AstraZeneca plc	38		3,816
AstraZeneca plc ADR	100		4,973
GlaxoSmithKline plc	471		11,108
GlaxoSmithKline plc ADR	139	_	6,54
		_	26,438
Industrials – 2.1%			
Babcock International Group			
plc	877		7,312
BAE Systems plc	1,017	_	7,609
		_	14,921
Information Technology – 1.4%			
Amdocs Ltd	130	_	9,380
Total United Kingdom – 12.5%		\$	87,085
	,	_	
TOTAL COMMON STOCKS – 94.3%	)	\$6	558,572
(Cost: \$665,437)			
INVESTMENT FUNDS			
United States – 1.4%			46 -
SPDR Gold Trust (A)	70	_	10,023
TOTAL INVESTMENT FUNDS – 1.4%	6	\$	10,023
(Cost: \$8,720)			
OTHER GOVERNMENT SECURITIES (D)	Principal		
Norway – 0.3%			
Norway Government Bond			
3.750%, 5-25-21 (E)(F) N	IOK21,060	_	2,479
TOTAL OTHER GOVERNMENT			
SECURITIES – 0.3%		\$	2,479

SHORT-TERM SECURITIES S	hares	Value
Money Market Funds (G) – 3.7% State Street Institutional U.S. Government Money Market Fund – Premier Class 1.550%	5,862	\$ 25,862
1.550% (H)	76	76
		25,938
TOTAL SHORT-TERM SECURITIES – 3.7	%	\$ 25,938
(Cost: \$25,938)		
TOTAL INVESTMENT SECURITIES – 99.7%		\$697,012
3LCORITIES - 33.1 /0		
(Cost: \$702,524)		
		2,065

#### Notes to Schedule of Investments

(A)No dividends were paid during the preceding 12 months.

(B)All or a portion of securities with an aggregate value of \$1,315 are held in collateralized accounts for OTC foreign forward currency contracts collateral.

(C)All or a portion of securities with an aggregate value of \$72 are on loan.

(D)Other Government Securities may include emerging markets sovereign, quasi-sovereign, corporate and supranational agency and organization debt securities.

(E)Principal amounts are denominated in the indicated foreign currency, where applicable (NOK – Norwegian Krone).

(F)Securities were purchased pursuant to an exemption from registration available under Rule 144A under the Securities Act of 1933 and may only be resold in transactions exempt from registration, normally to qualified institutional buyers. At December 31, 2019 the total value of these securities amounted to \$2,479 or 0.4% of net assets.

(G)Rate shown is the annualized 7-day yield at December 31, 2019.

(H)Investment made with cash collateral received from securities on loan.

The following forward foreign currency contracts were outstanding at December 31, 2019:

	Currency to be Delivered		Currency to be Received	Settlement Date	Counterparty	Unrealized Appreciation	Unrealized Depreciation
U.S. Dollar	58,936	Japanese Yen	6,310,648	1-10-20	Deutsche Bank AG	\$—	\$833

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks			
Communication Services	\$ 14,831	\$ 5,875	\$—
Consumer Discretionary	45,292	46,172	_
Consumer Staples	35,372	45,673	_
Energy	56,756	12,407	_
Financials	43,978	52,532	_
Health Care	37,777	54,516	_
Industrials	70,417	23,363	_
Information Technology	17,914	28,969	_
Materials	41,681	_	_
Real Estate	_	9,874	_
Utilities	7,631	7,542	_
Total Common Stocks	\$371,649	\$286,923	\$—
Investment Funds	10,023	_	_
Other Government Securities	_	2,479	_
Short-Term Securities	25,938	_	_
Total	\$407,610	\$289,402	\$—
Liabilities			
Forward Foreign Currency Contracts	\$ -	\$ 833	\$—

The following acronyms are used throughout this schedule:

ADR = American Depositary Receipts

OTC = Over The Counter

### **Market Sector Diversification**

# (as a % of net assets)

(do d /o of fiet dosets)	
Financials	13.8%
Industrials	13.4%
Health Care	13.2%
Consumer Discretionary	13.1%
Consumer Staples	11.6%
Energy	9.9%
Materials	7.4%
Information Technology	6.7%
Communication Services	3.0%
Utilities	2.2%
Real Estate	1.4%
Other Government Securities	0.3%
Other+	4.0%

<sup>+</sup>Includes cash and other assets (net of liabilities), and cash equivalents

(UNAUDITED)



Kimberly A. Scott

Nathan A. Brown

Below, Kimberly A. Scott, CFA, and Nathan A. Brown, CFA, co-portfolio managers of Ivy VIP Mid Cap Growth, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Ms. Scott has managed the Portfolio since its inception in 2005 and has 32 years of industry experience. Mr. Brown became co-portfolio manager in October 2016 and has 20 years of industry experience.

#### Fiscal Year Performance

For the 12 Months Ended December 31, 2019	
Ivy VIP Mid Cap Growth (Class II shares at net asset value)	37.94%
Benchmark and Morningstar Category	
Russell Midcap Growth Index (generally reflects the performance of securities that represent the mid-cap sector of the stock market)	35.47%
Morningstar Mid-Cap Growth Category Average (generally reflects the performance of the universe of Portfolios with similar investment objectives)	32.52%

Please note that Portfolio returns include applicable fees and expenses while index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

#### **Contributors and detractors**

Mid-cap growth stocks, as represented by the Portfolio's benchmark, the Russell Midcap Growth Index, gained 35.47% in the 12-month period ended December 31, 2019. Ivy VIP Mid Cap Growth posted a 37.94% return for the measurement period, soundly outperforming its benchmark and peer category average.

During the measurement period, the Portfolio experienced positive results in all sectors except for real estate and consumer staples. The strongest sector exposure was in consumer discretionary, followed by information technology, health care, materials, communication services, industrials and financials. All sectors benefited from strong stock selection. Energy provided a positive contribution due to our decision to have no exposure to companies within that sector. Negative contributions to relative performance came from real estate, where we had no exposure, and consumer staples, where the benefit of our underweight position was overcome by poor stock selection within that sector. Equity options were additive to returns in the form of a portfolio hedge implemented in July, when the trade agreement was in doubt and there was no substantial talk by the Federal Reserve (Fed) regarding interest rate policy changes. While we maintained cash at the low end of our comfortable range, it was a significant drag on the Portfolio throughout the year.

Holdings within the consumer discretionary sector made the greatest positive contribution to the Portfolio's return for the measurement period. We were overweight this sector, with our names outperforming the names held in the index by 5.99%. While the consumer discretionary sector is composed of 85 names in the benchmark, we chose to focus on 12 names in the sector, a couple of which are not in the index. The vast performance for the sector came from Chipotle Mexican Grill, Inc., MercadoLibre, Inc., Lululemon Athletica, Inc. and Tiffany & Co. Chipotle and Lululemon are both long-held names in the Portfolio that experienced tremendous growth throughout 2019 due to strong management execution on product sets that are innovative and differentiated in the marketplace. Both companies also began to see the fruits of their e-commerce strategies that ultimately drove better bottom-line results. As the year progressed and the stocks appreciated, we became more active in managing the position sizes within the Portfolio. We have taken some gains from each name while maintaining exposure to what we deem to be superior business models. MercadoLibre is a Latin American focused e-commerce company that demonstrated strong growth after emerging from a significant corporate investment period. Tiffany & Co. benefitted in the fourth quarter of 2019 from an unsolicited acquisition bid by the parent company of Louis Vuitton, and we chose to exit the position. Duluth Holdings, Inc. and GrubHub, Inc. were two standout detractors from performance for the year. Duluth is a specialty retailer that had disappointing sales performance as new store openings did not meet expectations in generating overall growth in the business. We have exited our position in Duluth. GrubHub is a scale provider in restaurant take-out and delivery that underperformed in 2019 due to intense competition in the industry. We think GrubHub will weather the competitive threat because of scale and should ultimately be able to expand into adjacent business lines by cross-selling as it more deeply integrates with restaurants. Despite the macro environment in the U.S. struggling with the trade war, the domestic consumer maintained resiliency throughout 2019, rewarding cyclically charged consumer companies.

Information technology names within the Portfolio were a strong positive performance group in aggregate. With 124 names comprising the benchmark's information technology sector, our portfolio of 23 names, while underweight the benchmark allocation, outperformed the index by 5.89%. Stock selection within this sector more than offset the underperformance caused by our strategy being underweight this strong performing sector. Top-performing names in the Portfolio included Teradyne, Inc. and Keysight Technologies, Inc., both of which provide, among other things, systems and network testing for the oncoming 5G market. Universal Display Corp., the dominant provider of phosphorous OLED products used for displays like televisions and foldable cell phones, was another strong contributor to the Portfolio return for the year. An overweight position to negative performing Arista Networks, Inc. hurt performance relative to the benchmark. Arista had a pullback on the year due in part to lackluster spending outlooks from the cloud titans who utilize Arista's cloud network solutions. We are maintaining exposure to Arista as we feel it is still a solid long-term provider in the cloud solutions infrastructure.

Health care was an overweight sector in the Portfolio relative to the benchmark where both allocation effect and stock selection were positive. Top names for the year were DexCom, Inc., Seattle Genetics, Inc., and Zoetis, Inc. DexCom engages in the design and development of continuous glucose monitoring systems for diabetics. It is benefitting from a best in class product suite as well as a shift from point in time blood glucose monitoring to continuous glucose monitoring. Seattle Genetics, a biotech company that engages in development of antibody-based therapies for the treatment of cancer, experienced strong growth from an existing lymphoma treatment while capturing positive early and later stage results for oncology therapies currently in its product pipeline. Zoetis, the global leader in animal health therapies for both livestock and companion animals, continues to grow sales and profits faster than industry peers with plenty of new products in the pipeline. Abiomed, Inc. was the standout detractor from Portfolio performance in the health care sector on the year. The heart pump maker had a slower than expected adoption rate in smaller hospitals and an early year U.S. Food and Drug Administration (FDA) letter that caused concern for the company's Impella heart pump. We have maintained a position in the name with the belief that the company's products are strong and that continual results from FDA studies will validate our thesis.

Industrials, like health care, contributed positively to the Portfolio on both an allocation and security selection basis, CoStar Group, Inc., the top holding in the Portfolio at the end of 2019, led this sector in performance for the year. CoStar Group is the leading provider of real estate data, analytics and marketplace listing platforms, including Apartments.com. It has a defensible franchise of mainly subscription-based revenue that continues to grow with solid management execution. Annual online traffic trends for Apartments.com and ForRent.com indicate robust growth over the past 12 months, far outpacing that of competitors.

Our materials exposure was a source of alpha generation, primarily related to a strong year from Scotts Miracle-Gro Companies. The Scotts Miracle-Gro consumer division continued steady growth throughout 2019 while it's Hawthorne division, the largest hydroponic distributor in the U.S., experienced some doubt early in the year before regaining solid footing in the fourth quarter with strong guidance going into 2020.

Consumer staples was the only sector where the Portfolio had negative stock selection for the measurement period. Sprouts Farmers Markets, Inc. experienced weaker than expected same store sales growth and had significant executive level management turnover. We sold our position in the third quarter but continue to monitor the name, given its market position in the healthy grocery store segment with few independent competitors.

#### Market conditions and outlook

The market's temperament was positive at the beginning of 2019, based on the Fed talk of halting interest rate hikes and much rhetoric around a resolution, albeit on the horizon, to the China/U.S. trade wars. Near-term confidence in the economy and corporate profits became in vogue again in the first quarter, with strong risk trade presenting itself in the markets. The market cooled substantially from the first quarter to the second, based largely on trade war concerns and the ultimate affect the impasse would have on global and domestic gross domestic product (GDP) growth. Though the ramifications of the impasse seemed largely contained, many of the rest of the world's economies were challenged to find solid growth footing. The Fed began to discuss interest rate cuts for the back half of 2019 and there was continual rhetoric around a resolution to the China/U.S. trade wars. Near-term confidence in the economy and corporate profits became more uncertain in the second quarter, with decelerating earnings growth once again the talk of the markets. The broad U.S. equity market continued its quarterly moderating return profile in the third quarter, based largely on trade war concerns and the ultimate effect the impasse would have on global and domestic GDP. The ramifications of the trade impasse coupled with political and geopolitical uncertainties appeared to be bleeding through to company management decisions relating to capital expenditures and productivity. The Fed implemented an interest rate cut late in the third quarter as an 'insurance measure' against the potential economic slowdown due to tariffs, but near-term confidence in the economy and corporate profits continued to be uncertain in quarter. The broad U.S. equity market reaccelerated in the fourth quarter, based largely on an agreement for phase 1 in the trade war, an acceptable level for the Fed Funds Rate, and indications that the trade impasse had not meaningfully constricted global growth. What is interesting is that the uncertainty around the U.S. political environment continues to hang over the markets, including a president who has been impeached by the House of Representatives, is seemingly of little consequence to the markets. Although many of the rest of the world's economies are challenged, it appears that the bottoming process is beginning to take place, with confidence growing around the trade agreement and motion in the finalization of the Brexit agreement. As expected, the Fed cut interest rates one final time in October, then signaled that it was entirely comfortable with the level as it stands now.

Domestic equities from large to mid to small had excellent returns in calendar year 2019, even though the U.S. economy was slowing (the Institute for Supply Management is in a contractionary state) and corporate earnings were decelerating. Looking into 2020, there are many positives forming as a market foundation, including a "Goldilocks" economy in the U.S., an apparent bottoming in many developed and emerging international economies, strong underlying corporate fundamentals, and continually strong consumer confidence level. On the flip side, the trade agreement has yet to be signed, there is significant uncertainty around the coming U.S. Presidential election, and there are plenty of geopolitical hotspots that could intensify.

We think the measurable positives outweigh any potential negatives for 2020, and our Portfolio continues to express a more economically constructive and optimistic view, with a more assertive pro-growth, less defensive stance. We are not expecting the same level of returns in the market that we saw in 2019 and we are cautiously mindful of elevated stock valuations in an environment of rising interest rates and potential inflationary pressure. We remain overweight the consumer discretionary, health care, financials and materials sectors and, while we are underweight, we still have a healthy exposure to the information technology sector. We remain steadfast in our approach in which stock selection drives performance, but we will prudently apply a macro overlay if need be, by utilizing more defensive sector exposure, cash and/ or portfolio hedging.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Investing in mid-cap stocks may carry more risk than investing in stocks of larger, more-established companies. Prices of growth stocks may be more sensitive to changes in current or expected earnings than the prices of other stocks. Growth stocks may not perform as well as value stocks or the stock market in general. The use of derivatives presents several risks, including the risk that these instruments may change in value in a manner that adversely affects the Portfolio's value and the risk that fluctuations in the value of the derivatives may not correlate with securities markets or the underlying asset upon which the derivative's value is based. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and include reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Mid Cap Growth.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	95.1%
Information Technology	26.8%
Health Care	17.6%
Consumer Discretionary	17.2%
Industrials	17.1%
Financials	6.4%
Materials	4.5%
Communication Services	4.0%
Consumer Staples	1.5%
Cash and Other Assets (Net of Liabilities), and Cash	
Equivalents+	4.9%

# **Top 10 Equity Holdings**

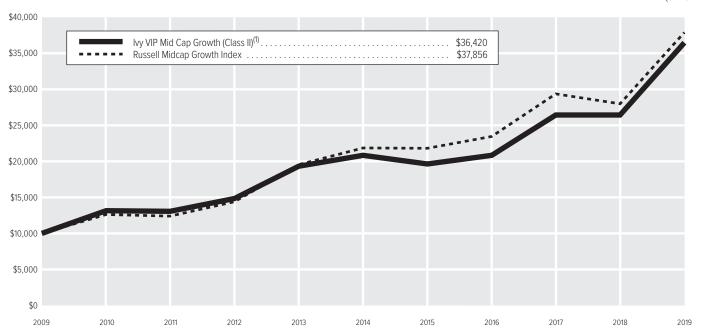
Company	Sector	Industry
CoStar Group, Inc.	Industrials	Research & Consulting Services
Electronic Arts, Inc.	Communication Services	Interactive Home Entertainment
Chipotle Mexican Grill, Inc., Class A	Consumer Discretionary	Restaurants
MarketAxess Holdings, Inc.	Financials	Financial Exchanges & Data
TransUnion	Industrials	Research & Consulting Services
Teradyne, Inc.	Information Technology	Semiconductor Equipment
Tractor Supply Co.	Consumer Discretionary	Specialty Stores
Fastenal Co.	Industrials	Trading Companies & Distributors
Keysight Technologies, Inc.	Information Technology	Electronic Equipment & Instruments
DexCom, Inc.	Health Care	Health Care Equipment

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# COMPARISON OF CHANGE IN VALUE OF \$10,000 INVESTMENT

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class I	Class II
1-year period ended 12-31-19	38.28%	37.94%
5-year period ended 12-31-19	_	11.83%
10-year period ended 12-31-19	_	13.80%
Since Inception of Class through 12-31-19 <sup>(3)</sup>	19.57%	_

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

(3)4-28-17 (the date on which shares were first acquired by shareholders).

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Interactive Home Entertainment – 3.0 Electronic Arts, Inc. (A)		\$ 16,434
Interactive Media & Services – 1.0% Twitter, Inc. (A)	. 168	5,374
Total Communication Services – 4.0%	Ď	21,808
Consumer Discretionary		
Apparel, Accessories & Luxury Goods Burberry Group plc (B)	. 224	6,534 7,912 14,446
Auto Parts & Equipment – 1.7% BorgWarner, Inc.	. 214	9,285
Automotive Retail – 1.3% O'Reilly Automotive, Inc. (A)	. 16	7,180
Department Stores – 0.7% Nordstrom, Inc.	. 92	3,750
Internet & Direct Marketing Retail – 2	6%	
Grubhub, Inc. (A)	. 107	5,221 8,829 14,050
Restaurants — 4.3% Chipotle Mexican Grill, Inc., Class A (A)		15,300 8,601 23,901
Specialty Stores – 4.0% Tractor Supply Co		12,903 8,919 21,822
Total Consumer Discretionary – 17.2%	,	94,434
Consumer Staples		
Packaged Foods & Meats – 1.5% Hershey Foods Corp.	. 55	8,051
Total Consumer Staples – 1.5%		8,051
Financials		
Financial Exchanges & Data – 3.2% Chicago Board Options Exchange,		
Inc		3,501
		17,344
Regional Banks — 3.2% First Republic Bank		10,130 7,480
		17,610
Total Financials – 6.4%		34,954

COMMON STOCKS (Continued)	Shares	Value
Health Care		
Biotechnology – 1.6% Seattle Genetics, Inc. (A)	78	\$ 8,859
Health Care Equipment – 7.7%		
Abiomed, Inc. (A)	35	5,970
DexCom, Inc. (A)	52	11,365
Edwards Lifesciences Corp. (A)	47	10,920
Glaukos Corp. (A)	86	4,702
Intuitive Surgical, Inc. (A)	16	9,470
		42,427
Health Care Services — 2.0% Laboratory Corp. of America		
Holdings (A)	43	7,209
Teladoc Health, Inc. (A)(C)	43	3,608
		10,817
Health Care Supplies – 0.9%		
National Vision Holdings, Inc. (A)	157	5,091
Health Care Technology – 2.0%		
Cerner Corp	148	10,837
Life Sciences Tools & Services – 2.0%		
10x Genomics, Inc., Class A (A)	9	714
Agilent Technologies, Inc	80	6,796
TECHNE Corp	15	3,200
.20.11.2 00.10.	.0	10,710
Pharmaceuticals – 1.4%		
Zoetis, Inc	58	7,648
Total Health Care – 17.6%		96,389
Industrials		
Aerospace & Defense – 1.5% L3Harris Technologies, Inc.	43	8,440
Building Products – 2.9%		
A. O. Smith Corp	180	8,571
Trex Co., Inc. (A)	83	7,415
		15,986
Industrial Machinery — 4.5% Gardner Denver Holdings, Inc. (A)	16 E	6.025
3 ,	165 54	6,035 9,371
IDEX Corp	82	9,035
wilddieby corp. (A)	02	
		24,441
Research & Consulting Services – 5.9		40.05:
CoStar Group, Inc. (A)	32	18,851
TransUnion	158	13,542
		32,393
Trading Companies & Distributors – 2.	.3%	
Fastenal Co	335	12,360
Total Industrials – 17.1%		93,620

COMMON STOCKS (Continued)	Shares	Value
Information Technology		
Application Software – 4.7%		
DocuSign, Inc. (A)	92	\$ 6,83
Guidewire Software, Inc. (A)	99	10,898
Tyler Technologies, Inc. (A)	27	8,076
, , , , , , , , , , , , , , , , , , , ,		25,805
Communications Equipment – 1.3%	0.5	7.04
Arista Networks, Inc. (A)	35	7,214
Data Processing & Outsourced Servi	ces – 1.8	%
Square, Inc., Class A (A)	154	9,653
Electronic Components – 1.9%		75
II-VI, Inc. (A)	22	754
Maxim Integrated Products, Inc	159	9,785
		10,539
Electronic Equipment & Instruments	- 3.7%	
Coherent, Inc. (A)	33	5,502
Keysight Technologies, Inc. (A)	116	11,906
Novanta, Inc. (A)	32	2,787
		20,195
Internet Services & Infrastructure – 1		
Twilio, Inc., Class A (A)	59	5,762
VeriSign, Inc. (A)	9	1,742
		7,504
Semiconductor Equipment – 2.4%		
Teradyne, Inc.	193	13,134
Semiconductors – 7.0%		
Advanced Micro Devices, Inc. (A)	213	9,790
Microchip Technology, Inc	101	10,616
Monolithic Power Systems, Inc	59	10,447
Universal Display Corp	37	7,536
		38,389
Systems Software – 2.6%		
Palo Alto Networks, Inc. (A)	35	8,209
ServiceNow, Inc. (A)	22	6,258
Service Now, Inc. (A)	22	
		14,467
Total Information Technology – 26.8	%	146,900
Materials		
Fertilizers & Agricultural Chemicals –	.13%	
Scotts Miracle-Gro Co. (The)	65	6,862
Specialty Chemicals – 3.2%	205	0.00
Axalta Coating Systems Ltd. (A)	295	8,968
RPM International, Inc	112	8,618
		17,586
Total Materials – 4.5%		24,448
TOTAL COMMON STOCKS – 95.1%		\$520,604
TOTAL COMMUNICIN STUCKS - 93.1%		ψυZU,0U²

(Cost: \$376,071)

SHORT-TERM SECURITIES	Shares		Value
Money Market Funds (D) – 4.9% State Street Institutional U.S. Government Money Market Fund – Premier Class, 1.550%	26,803	\$	26,803
TOTAL SHORT-TERM SECURITIES – 4.	.9%	\$	26,803
(Cost: \$26,803)			
TOTAL INVESTMENT SECURITIES – 10	0.0%	\$!	547,407
(Cost: \$402,874)			
CASH AND OTHER ASSETS, NET OF LIABILITIES – 0.0%			159
NET ASSETS – 100.0%		\$5	547,566

#### Notes to Schedule of Investments

(A)No dividends were paid during the preceding 12 months.

(B)Listed on an exchange outside the United States.

(C)All or a portion of securities with an aggregate value of \$3,229 are on loan.

(D)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets	,		
Investments in Securities			
Common Stocks	\$520,604	\$—	\$—
Short-Term Securities	26,803	_	_
Total	\$ 547,407	\$-	\$-

(UNAUDITED)



David P. Ginther



Michael T. Wolverton

Below, David P. Ginther, CPA, and Michael T. Wolverton, CFA, portfolio managers of Ivy VIP Natural Resources, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Ginther has managed the Portfolio since 2013 and has 24 years of industry experience. Mr. Wolverton has managed the Portfolio since 2016 and has 15 years of industry experience.

#### **Fiscal Year Performance**

0.400/
9.46%
17.63%
14.95%

Please note that the Portfolio returns include applicable investment fees and expenses, whereas the index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in lvy Variable Insurance Portfolios.

#### Transition year for energy

The energy market struggled against the broader equity market and underperformed for a third straight year despite the crude oil price rising by over 30%. This move higher in oil came after moving sharply lower in the fourth quarter of the previous year, however. Despite the higher oil price, energy equities struggled to overcome concerns about a U.S.-China trade deal having a negative effect on demand along with the price volatility. Additionally, excess capacity for oil supply, poor financial performance by the sector and a shift away from energy by investors because of environmental concerns helped cause a sharp decline in the multiples for the equities.

All of these issues have created strategic questions for companies in the sector and are causing their management teams to re-evaluate strategies and modify business models. Many U.S. energy companies are shifting away from prioritizing production growth and moving to prioritizing free cash flow and return on capital employed. This is a welcome change in our view, but only time will tell if energy companies are able to execute the strategy and stick with it in the years ahead. At the very least, we believe these changes will slow oil supply growth for the industry, especially in the U.S.

The other significant player in the oil market beside the U.S. is OPEC. After cutting its production quota in November 2018, the organization again announced plans to further reduce supply in December 2019. OPEC, for the time being, has showed a strong willingness to balance the oil market in an attempt to support the price. The combination of deceleration in U.S. oil supply growth and decreased OPEC supply allowed the oil price to end the year at around \$61 per barrel for West Texas Intermediate, the U.S. benchmark.

#### Portfolio positioning

The Portfolio had a positive return for the fiscal year but trailed the return of its benchmark index and category average. The Portfolio in general was underweight the energy sector and overweight the materials sector compared to its benchmark. The Portfolio averaged about 62% energy exposure for the year, with the remainder in materials.

Globally, the energy sector significantly underperformed the materials sector during the fiscal year, but both sectors underperformed the overall market. Generally, more defensive names outperformed in energy, as did companies with high-quality balance sheets. The Portfolio was underweight the industry segments of Integrated Oil, Pipelines, and Precious Metals, which detracted from performance. Overweight positions in Refining, Railroads, Chemicals, and Other Metals contributed to positive relative performance.

The Portfolio's five greatest contributors to performance relative to the benchmark in the year were underweight positions in Exxon Mobil Corp., Occidental Petroleum Corp., ConocoPhillips, and overweight positions in Rio Tinto plc and Canadian Pacific Railway Ltd. At the end of the fiscal year, Exxon Mobil Corp. and Occidental Petroleum Corp. were no longer holdings in the Portfolio.

The five greatest detractors from relative performance were Centennial Resource Development, Inc., Halliburton Co., Concho Resources Inc., Core Laboratories N.V., and Anadarko Petroleum Corp. At the end of the fiscal year, Centennial Resource Development, Inc., and Anadarko Petroleum Corp. were no longer holdings in the Portfolio.

### Capital discipline is critical to stock performance

Even though the oil market enters the year 2020 relatively balanced, oil supply capacity remains abundant with excess capability from OPEC and the U.S. With OPEC signaling that it is willing to cede market share to keep the market in balance, responsibility for capital discipline falls on the U.S. producers. If these companies follow through on promises to limit capital expenditures, restrain production growth and produce free cash flow, we believe the energy sector will likely see positive stock performance. If excess cash flows are redirected into more drilling, however, we think investors are likely to be disappointed.

U.S. oil production is forecast to decelerate in 2020. After growing over 1 million barrels per day in 2019, production could grow at half that rate in 2020 based on current drilling activity. We believe this would be a positive step toward a recovery in the energy markets.

On the demand side, risks remain both in the short and long term. Both the energy and materials sectors are quite sensitive to the level of demand for commodities in emerging markets, especially China. Demand for commodities is also dependent on currency movements, particularly in the U.S. dollar. If recent declines in the value of the dollar continue, we think it will likely be supportive for emerging market and commodity demand.

The Portfolio is focusing on equities across the natural resources landscape that we believe can deliver above-market returns on capital, with disciplined capital allocation and a strong balance sheet.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Investing in companies involved in one specified sector may be more risky and volatile than an investment with greater diversification. Investing in natural resources can be riskier than other types of investment activities because of a range of factors, including price fluctuation caused by real and perceived inflationary trends and political developments; and the cost assumed by natural resource companies in complying with environmental and safety regulations.

International investing involves additional risks, including currency fluctuations, political or economic conditions affecting the foreign country, and differences in accounting standards and foreign regulations. These risks are magnified in emerging markets.

Commodity trading, including trading in precious metals, is generally considered speculative because of the significant potential for investment loss. Markets for commodities are likely to be volatile and there may be sharp price fluctuations even during periods when prices overall are rising.

These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and includes reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Natural Resources.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	96.6%
Energy	60.5%
Materials	30.0%
Industrials	5.6%
Information Technology	0.5%
Liabilities (Net of Cash and Other Assets), and Cash	
Equivalents+	3.4%

# **Country Weightings**

North America	75.4%
United States	64.8%
Canada	10.6%
Europe	14.8%
United Kingdom	7.0%
Other Europe	7.8%
Pacific Basin	4.6%
Australia	3.6%
Other Pacific Basin	1.0%
Other	1.8%
Liabilities (Net of Cash and Other Assets), and Cash	
Equivalents+	3.4%

# **Top 10 Equity Holdings**

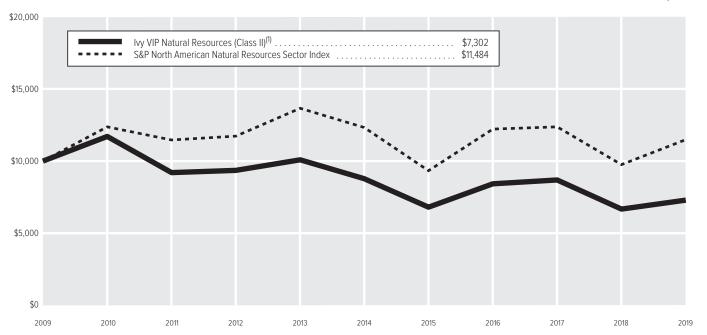
Company	Country	Sector	Industry
Phillips 66	United States	Energy	Oil & Gas Refining & Marketing
Chevron Corp.	United States	Energy	Integrated Oil & Gas
Marathon Petroleum Corp.	United States	Energy	Oil & Gas Refining & Marketing
Valero Energy Corp.	United States	Energy	Oil & Gas Refining & Marketing
ConocoPhillips	United States	Energy	Oil & Gas Exploration & Production
BHP Group plc	Australia	Materials	Diversified Metals & Mining
Rio Tinto plc	United Kingdom	Materials	Diversified Metals & Mining
Barrick Gold Corp.	Canada	Materials	Gold
EOG Resources, Inc.	United States	Energy	Oil & Gas Exploration & Production
Concho Resources, Inc.	United States	Energy	Oil & Gas Exploration & Production

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# COMPARISON OF CHANGE IN VALUE OF \$10,000 INVESTMENT

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class II
1-year period ended 12-31-19	9.46%
5-year period ended 12-31-19	-3.63%
10-year period ended 12-31-19	-3.10%

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Australia		
Materials – 3.6% BHP Group plc	133	\$ 3,135
Total Australia – 3.6%		\$ 3,135
Canada		
Energy – 1.5% Suncor Energy, Inc.	41	1,336
Industrials – 2.8% Canadian Pacific Railway Ltd	10	2,427
Materials — 6.3% Barrick Gold Corp	35	2,930 1,658 931 5,519
Total Canada – 10.6%		\$9,282
France		. ,
Energy – 3.0% Total S.A. ADR	48	2,630
Total France – 3.0%		\$2,630
Hong Kong		
Materials — 0.0% China Metal Recycling (Holdings) Ltd. (B)(C)	1,900	*
Total Hong Kong – 0.0%		\$ -*
India		
Energy – 1.0% Reliance Industries Ltd	43	902
Total India – 1.0%		\$ 902
Netherlands		
Energy – 2.6% Core Laboratories N.V	14 59	533 1,737
		2,270
Total Netherlands – 2.6%		\$2,270
Portugal		
Energy – 2.2% Galp Energia SGPS S.A., Class B	115	1,928
Total Portugal – 2.2%		\$1,928
South Africa		
Materials – 1.8% Mondi plc	68	1,602
Total South Africa – 1.8%		\$1,602

COMMON STOCKS (Continued)	Shares	Value
United Kingdom		
Energy – 2.5%		
BP plc	350	\$ 2,187
Materials – 4.5%		
Croda International plc	14	948
Rio Tinto plc	51	3,022
		3,970
Total United Kingdom – 7.0%		\$ 6,157
United States		, .
Energy – 47.7%		
Cabot Oil & Gas Corp	68	1,181
Chevron Corp	35	4,172
Cimarex Energy Co	19	1,001
Concho Resources, Inc	31	2,717
ConocoPhillips	49	3,206
Diamondback Energy, Inc	24	2,260
Enterprise Products Partners L.P	88	2,486
EOG Resources, Inc	34	2,852
Halliburton Co	77	1,894
HollyFrontier Corp	7	377
Magellan Midstream Partners L.P	35	2,179
Marathon Petroleum Corp	59	3,537
Noble Energy, Inc	64	1,588
ONEOK, Inc.	24	1,784
Parsley Energy, Inc., Class A	70	1,327
Phillips 66	38	4,241
Valero Energy Corp	37	3,443
WPX Energy, Inc. (B)	111	1,520
		41,765
Industrials – 2.8%		
Union Pacific Corp	14	2,465
Information Technology – 0.5%		
Enphase Energy, Inc. (A)(B)	18	460
Materials – 13.8%		
Air Products and Chemicals, Inc	6	1,388
Albemarle Corp	6	465
Avery Dennison Corp	6	812
FMC Corp	9	880
Graphic Packaging Holding Co	34	558
Huntsman Corp	37	894
LyondellBasell Industries N.V., Class A	9	876
Packaging Corp. of America	13	1,480
PPG Industries, Inc	13	1,774
Sherwin-Williams Co. (The)	2	1,329
Southern Copper Corp	37	1,578
		12,034
Tabal Harbard Chahara CA 000		¢=0.70:
Total United States – 64.8%		\$56,724
TOTAL COMMON STOCKS – 96.6%		\$84,630
(Cost: \$94,201)		-

SHORT-TERM SECURITIES Shares	s Value
Money Market Funds (D) – 7.1% State Street Institutional U.S. Government Money Market Fund – Premier Class 1.550% 3,446 Dreyfus Institutional Preferred Government Money Market Fund –	\$ 3,446
Institutional Shares 1.550% (E) 2,806	2,806 6,252
TOTAL SHORT-TERM SECURITIES – 7.1%	\$ 6,252
(Cost: \$6,252)	\$ 0,232
TOTAL INVESTMENT SECURITIES – 103.7%	\$90,882
(Cost: \$100,453)	
LIABILITIES, NET OF CASH AND OTHER ASSETS (F) – (3.7)%	(3,274)

#### Notes to Schedule of Investments

\*Not shown due to rounding.

(A)All or a portion of securities with an aggregate value of \$2,719 are on loan.

(B)No dividends were paid during the preceding 12 months.

(C)Securities whose value was determined using significant unobservable inputs.

(D)Rate shown is the annualized 7-day yield at December 31, 2019.

(E)Investment made with cash collateral received from securities on loan.

(F)Cash of \$610 has been pledged as collateral on OTC forward foreign currency contracts.

The following forward foreign currency contracts were outstanding at December 31, 2019:

	Currency to be Delivered		Currency to be Received	Settlement Date	Counterparty	Unrealized Appreciation	Unrealized Depreciation
Euro	5,615	U.S. Dollar	6,189	1-10-20	Morgan Stanley International	\$-	\$ 112
British Pound	8,156	U.S. Dollar	10,032	1-10-20	UBS AG	_	773
Canadian Dollar	1,169	U.S. Dollar	884	1-10-20	UBS AG	_	16
						<u>\$</u>	\$901

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks	\$84,630	\$ —	\$—*
Short-Term Securities	6,252	_	_
Total	\$90,882	\$ —	\$-*
Liabilities			
Forward Foreign Currency Contracts	\$ -	\$901	\$

During the year ended December 31, 2019, there were no transfers in or out of level 3.

The following acronym is used throughout this schedule:

ADR = American Depositary Receipts

OTC = Over the Counter

#### **Market Sector Diversification**

#### (as a % of net assets)

Energy	60.5%
Materials	30.0%
Industrials	5.6%
Information Technology	0.5%
Other+	3.4%

<sup>+</sup>Includes liabilities (net of cash and other assets), and cash equivalents

See Accompanying Notes to Financial Statements.

(UNAUDITED)



Zachary H. Shafran



Bradley J. Warden

Below, Zachary Shafran and Bradley Warden, portfolio managers of Ivy VIP Science and Technology, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Shafran has managed the Portfolio since 2001 and has 31 years of industry experience. Mr. Warden has managed the Portfolio since 2016 and was previously an assistant portfolio manager on the Portfolio from 2014 to 2016. He has 22 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Science and Technology (Class II)	49.48%
Benchmark and Morningstar Category	
S&P North American Technology Sector Index (generally reflects the performance of U.S. science and technology stocks)	42.68%
Morningstar Technology Category Average (generally reflects the performance of the universe of funds with similar investment objectives)	37.49%

Please note that the Portfolio returns include applicable investment fees and expenses, whereas the index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

### Strong markets despite continued macroeconomic and political concerns

Equity and fixed-income markets were strong in the fiscal year ended December 31, 2019. U.S. growth continued through the fiscal year, driven by a strong job market and supportive economy, while some key global economies, like China, struggled under the negative sentiment of increasing tariffs. Over the course of the fiscal year, markets rebounded from the latter months of 2018 when domestic markets began to fear the long-term impacts of trade policy and a potential policy mistake by the Federal Reserve (Fed).

Along with the Fed's pivot away from monetary policy tightening in early 2019, other areas of the world echoed a similar easing of monetary policy. The markets' primary concerns around the final rate increase in December 2018 related to softening in the domestic housing market and continued trade-related slowdowns. Following the December 2018 rate increase, the Fed expressed a more dovish outlook on monetary policy in 2019 and stuck with it during calendar year 2019. Inflation remained in check through the fiscal year, even with stronger wage growth being offset by energy and housing price relief.

The Fed's actions were in focus, but the U.S.-China trade war created the greatest uncertainty in the markets over the past fiscal year. China's economy and markets saw significant weakening over the course of the fiscal year. We believe a negotiated solution is in the best interest of each country, and the emergence of "phase one" of a trade settlement helped to sustain the market's upward trajectory.

Beyond the global challenges, the U.S. House of Representatives pushed forward articles of impeachment against President Trump, which further complicates policymaking preceding the upcoming U.S. presidential election. The markets shrugged off any real concern on the issue, believing the Republican-controlled Senate will not garner the votes needed to impeach the president.

During the fiscal year, information technology stocks performed well with the Portfolio's benchmark advancing 42.7%. Within information technology, the technology hardware subsector performed well on the back of Apple's stellar performance, while the semiconductor subsector also outperformed the other subsectors. We continue to believe semiconductors are key to future innovation within information technology and that consolidation, operating leverage, balance sheet strength, increases in dividend payments and strong management should provide stability and growth for this subsector. The software subsector performed in line with the benchmark, following a few years of outperformance.

On the health care front, a few health care technology and biotech stocks had strong performance, but the aggregate health care portion of the portfolio relatively underperformed, largely due to the outsized performance of the information technology sector. We believe health care policy and drug pricing likely get additional focus, though major health care policy changes seem unlikely given the current government composition.

### Semiconductor exposure drove outperformance

The Portfolio outperformed its benchmark and its Morningstar peer group average during the fiscal year. Outperformance in the Portfolio's technology exposure was primarily driven by the positions in Universal Display Corp., Cypress Semiconductor Corp., WNS Holdings, and Micron Technology Inc. Underweight positions in Amazon.com, Inc. and Cisco Systems, Inc. contributed positively to relative returns as well. The Portfolio no longer holds Cypress Semiconductor Corp. or Cisco Systems, Inc., as of Dec. 31, 2019.

Health care is not represented in the benchmark, so the Portfolio's allocation to the sector is an important distinction when comparing performance metrics. In the fiscal year, the Portfolio's health care allocation detracted from relative performance, with outperformance in health care technology offset by underperformance in biotechnology. Within biotechnology, Vertex Pharmaceuticals, Inc. was the greatest positive contributor.

The Portfolio used derivatives over the reporting period, but the usage had no material impact on Portfolio performance.

# Portfolio positioning

While we recognize the challenges of the world economic backdrop, we are excited about the innovation and growth that is taking place within certain companies. We believe many stocks in the information technology space remain relatively well-positioned going forward. We saw a meaningful rebound in fiscal 2019 after the late sell-off in 2018. The Portfolio had approximately 62% of its equity exposure in the information technology sector, as of Dec. 31, 2019. The exposure in information technology is lower year over year due to the creation of the communication services sector, which includes many companies previously in the information technology sector. The Portfolio had approximately 15% of its equity assets in the communication services sector, as of Dec. 31, 2019.

As of the fiscal year end, roughly 14% of the Portfolio's equity assets were in the health care sector. In developing markets, as the standard of living increases, we believe the demand for quality health care should increase. In our view, biotechnology, health care information technology systems and pharmaceuticals are among the greatest innovators and early adopters of new science and technology, so we are paying particularly close attention to companies in those areas. Even with rhetoric around drug pricing, we believe biotechnology and pharmaceutical companies that bring economic value to the market (e.g. fewer hospitalizations and better patient productivity) should see significant returns and appreciating stock prices. We believe the next few years should continue to be constructive for biotechnology company stocks and we have added several names in this area, as we expect significant innovation and economic returns.

The Portfolio's "applied science and technology" holdings span several industries and sectors and make up the remainder of the Portfolio's equity composition. At the end of the fiscal year, the Portfolio's cash position was 2.6% of net assets. We almost always have some cash on hand in an effort to take advantage of opportunities that may present themselves, or to use as a defensive measure to protect the Portfolio in adverse market conditions.

#### Seeking opportunities in a volatile market

Going forward, with global trade tensions easing and more dovish monetary policy, we are cautiously optimistic on the broader macroeconomy. Core to this optimism is an expectation of continued progress in the trade war through the balance of 2020. This action is in the long-term best interests of both the U.S. and China and we believe that progress towards negotiations should be supportive of financial markets. Company management teams express varying levels of optimism about economic growth. We also recognize that global economic growth is likely to continue to be questioned as aggressive global monetary easing slows and global trade policy questions linger. With this backdrop, we expect any potential volatility to provide opportunities for positioning in key innovation-led names that fit our process and long-term holding strategy.

For the upcoming fiscal year, we believe growth may be lower than fiscal 2019, though asset prices largely reflect this expectation. That said, we intend to continue to be prudent in balancing growth with valuations, as we believe there are many potential investment opportunities — especially in biotechnology, data and semiconductors — around the world. As we look at the securities of such companies, we are focused on what we believe are good growth prospects and sound capital structures. We believe there will be improvement in capital spending trends, and we are looking for a continuation of an active mergers-and-acquisition environment. As always, we continue to carefully monitor the macroeconomic environment, but our focus remains primarily on security-specific fundamental research. Going forward, we believe this attention to bottom-up research, coupled with the innovation and transformation under way across the globe should continue to provide investment opportunities for the Portfolio.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Because the Portfolio invests more than 25% of its total assets in the science and technology industry, the Portfolio's performance may be more susceptible to a single economic, regulatory or technological occurrence than a fund that does not concentrate its investments in this industry. Securities of companies within specific industries or sectors of the economy may periodically perform differently than the overall market. In addition, the Portfolio's performance may be more volatile than an investment in a portfolio of broad market securities and may underperform the market as a whole, due to the relatively limited number of issuers of science and technology related securities. Investment risks associated with investing in science and technology securities, in addition to other risks, include: operating in rapidly changing fields, abrupt or erratic market movements, limited product lines, markets or financial resources, management that is dependent on a limited number of people, short product cycles, aggressive pricing of products and services, new market entrants and obsolescence of existing technology.

International investing involves additional risks, including currency fluctuations, political or economic conditions affecting the foreign country, and differences in accounting standards and foreign regulations.

Dividend-paying stocks may fall out of favor with investors and underperform non-dividend paying stocks and the market as a whole. In addition, dividend-paying companies may not pay dividends in the future; such dividends, if declared, may not remain at current levels or increase over time. The amount of any dividend the company may pay may fluctuate significantly. Dividend-paying stocks can decline in value when interest rates rise; this risk may be greater during the current period of historically low interest rates. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and includes reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Science and Technology.

ALL DATA IS AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	97.5%
Information Technology	60.4%
Communication Services	14.5%
Health Care	13.3%
Consumer Discretionary	7.2%
Real Estate	1.5%
Industrials	0.4%
Materials	0.2%
Warrants	0.0%
Bonds	0.1%
Corporate Debt Securities	0.1%
Liabilities (Net of Cash and Other Assets), and Cash Equivalents+	2.4%

## **Country Weightings**

80.1%
80.1%
11.3%
4.6%
4.3%
2.4%
6.2%
2.4%

## **Top 10 Equity Holdings**

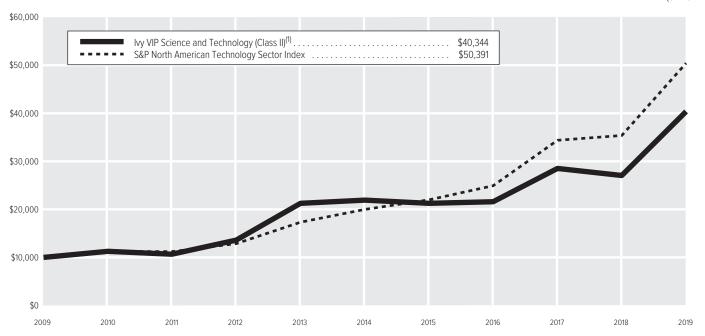
Company	Country	Sector	Industry
Microsoft Corp.	United States	Information Technology	Systems Software
Apple, Inc.	United States	Information Technology	Technology Hardware, Storage & Peripherals
Facebook, Inc., Class A	United States	Communication Services	Interactive Media & Services
Micron Technology, Inc.	United States	Information Technology	Semiconductors
Alibaba Group Holding Ltd. ADR	China	Consumer Discretionary	Internet & Direct Marketing Retail
Vertex Pharmaceuticals, Inc.	United States	Health Care	Biotechnology
Aspen Technology, Inc.	United States	Information Technology	Application Software
ACI Worldwide, Inc.	United States	Information Technology	Application Software
Euronet Worldwide, Inc.	United States	Information Technology	Data Processing & Outsourced Services
WNS (Holdings) Ltd. ADR	India	Information Technology	Data Processing & Outsourced Services

See your advisor or www.ivy investments. com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup>Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# COMPARISON OF CHANGE IN VALUE OF \$10,000 INVESTMENT

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class I	Class II
1-year period ended 12-31-19	49.86%	49.48%
5-year period ended 12-31-19	_	13.04%
10-year period ended 12-31-19	_	14.97%
Since Inception of Class through 12-31-19 <sup>(3)</sup>	21.09%	_

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be

(3)4-28-17 (the date on which shares were first acquired by shareholders).

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Interactive Home Entertainment – 2.2 Electronic Arts, Inc. (A)	57	\$ 6,171
Inc. (A)	56	6,832
		13,003
Interactive Media & Services – 11.3% Alphabet, Inc., Class A (A)	11 14 156	15,135 18,441 32,027 65,603
Movies & Entertainment – 1.0% Walt Disney Co. (The)	38	5,518
Total Communication Services – 14.5	%	84,124
Consumer Discretionary		
Internet & Direct Marketing Retail – 7 Alibaba Group Holding Ltd.	.2%	
ADR (A)	128 6 2	27,085 10,348 4,582 42,015
Total Consumer Discretionary – 7.2%		42,015
Health Care		12,010
Biotechnology – 9.0% CRISPR Therapeutics AG (A) Evogene Ltd. (A) Ionis Pharmaceuticals, Inc. (A)(B) Moderna, Inc. (A) Sage Therapeutics, Inc. (A) Sarepta Therapeutics, Inc. (A) Vertex Pharmaceuticals, Inc. (A)	66 137 144 116 31 62 123	4,050 205 8,697 2,270 2,216 8,001 26,955 52,394
Health Care Services – 0.6% Teladoc Health, Inc. (A)(B)	44	3,709
Health Care Technology – 3.7% Cerner Corp	290	21,262
Total Health Care – 13.3%		77,365
Industrials		
Trucking – 0.4% Lyft, Inc., Class A (A)	56	2,423
Total Industrials – 0.4%		2,423
Information Technology		
Application Software — 11.1% ACI Worldwide, Inc. (A)	681 221 27 34	25,818 26,737 6,260 5,558 64,373

COMMON STOCKS (Continued)	Shares	Value
Data Processing & Outsourced Servic	es – 10	
Euronet Worldwide, Inc. (A)	160	\$ 25,213
Fiserv, Inc. (A)	85	9,858
WNS (Holdings) Ltd. ADR (A)	379	25,081
		60,152
Semiconductor Equipment – 3.0%		
ASML Holding N.V., NY Registry		
Shares	59	17,431
Semiconductors – 17.3%	C 10	44.540
Infineon Technologies AG (C)	649	14,513
Microchip Technology, Inc. (B)	83	8,702
Micron Technology, Inc. (A)	532	28,621
QUALCOMM, Inc.	135 139	11,937
Semtech Corp. (A)	133	7,351
Manufacturing Co. Ltd. ADR	120	6,952
Universal Display Corp	109	22,457
		100,533
Systems Software – 11.2%		
Microsoft Corp	373	58,824
ServiceNow, Inc. (A)	22	6,106
•		64,930
Technology Hardware, Storage & Per		
A I I		20 002
Apple, Inc.	123	36,002
Samsung Electronics Co. Ltd. (C)	123 142	6,811
Samsung Electronics Co. Ltd. (C)	142	6,811
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49	142	6,811
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49  Materials	142 <u>%</u>	6,811
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49  Materials  Fertilizers & Agricultural Chemicals –	142 %	6,811 42,813 350,232
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49  Materials  Fertilizers & Agricultural Chemicals –	142 %	6,811
Total Information Technology – 60.49  Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)	142 %	6,811 42,813 350,232
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49  Materials  Fertilizers & Agricultural Chemicals –  Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%	142 %	6,811 42,813 350,232
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49  Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate	142 %	6,811 42,813 350,232
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5%	142 % 0.2% 1,116	6,811 42,813 350,232 1,127
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49  Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate	142 %	6,811 42,813 350,232
Total Information Technology – 60.49 Materials Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2% Real Estate Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A	142 % 0.2% 1,116	1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5%	142 % 0.2% 1,116	6,811 42,813 350,232 1,127
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2% Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5%	142 % 0.2% 1,116	1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2% Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5%	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5% (Cost: \$300,862)	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2% Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5% (Cost: \$300,862) WARRANTS	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2% Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5% (Cost: \$300,862)  WARRANTS  Fertilizers & Agricultural Chemicals –	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5% (Cost: \$300,862)  WARRANTS  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc., expires 12-31-20 (D)(E)	142 % 0.2% 1,116 160 0.0% 230	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5%  QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5%  (Cost: \$300,862)  WARRANTS  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc., expires 12-31-20 (D)(E)	142 % 0.2% 1,116	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5% (Cost: \$300,862)  WARRANTS  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc., expires 12-31-20 (D)(E)	142 % 0.2% 1,116 160 0.0% 230	6,811 42,813 350,232 1,127 1,127 8,700
Samsung Electronics Co. Ltd. (C)  Total Information Technology – 60.49 Materials  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc. (A)  Total Materials – 0.2%  Real Estate  Specialized REITs – 1.5% QTS Realty Trust, Inc., Class A  Total Real Estate – 1.5%  TOTAL COMMON STOCKS – 97.5% (Cost: \$300,862)  WARRANTS  Fertilizers & Agricultural Chemicals – Marrone Bio Innovations, Inc., expires 12-31-20 (D)(E)	142 % 0.2% 1,116 160 0.0% 230	6,811 42,813 350,232 1,127 1,127 8,700

CORPORATE DEBT SECURITIES	Principal	,	Value
Materials			
Fertilizers & Agricultural Chemical Marrone Bio Innovations, Inc.,		¢	202
8.000%, 8-20-20 (D)	. \$ 200	\$	293
Total Materials – 0.1%			293
TOTAL CORPORATE DEBT SECURITIES – 0.1%		\$	293
(Cost: \$288)			
SHORT-TERM SECURITIES	Shares		
Money Market Funds (F) – 2.4% State Street Institutional U.S. Government Money Market Fund – Premier Class,			
1.550%	14,152	_	14,152
TOTAL SHORT-TERM SECURITIES	- 2.4%	\$	14,152
(Cost: \$14,152)			
TOTAL INVESTMENT SECURITIES -	- 100.0%	\$!	580,431
(Cost: \$315,302)			
LIABILITIES, NET OF CASH AND O' ASSETS – 0.0%	THER		(8
NET ASSETS – 100.0%		\$5	80,423

#### Notes to Schedule of Investments

\*Not shown due to rounding.

(A)No dividends were paid during the preceding 12 months.

(B)All or a portion of securities with an aggregate value of \$5,497 are on loan.

(C)Listed on an exchange outside the United States.

(D)Restricted securities. At December 31, 2019, the Portfolio owned the following restricted securities:

Security	Acquisition Date(s)	Principal	Cost	Value
Marrone Bio Innovations, Inc., 8.000%, 08-20-20	8-20-15	\$288	\$288	\$293
		Shares		
Marrone Bio Innovations, Inc., expires 12-31-20	2-6-18	230	_	_*
Marrone Bio Innovations, Inc., expires 8-20-23	8-20-15	230	_	_*
			\$288	\$293

The total value of these securities represented 0.1% of net assets at December 31, 2019.

(E)Warrants entitle the Portfolio to purchase a predetermined number of shares of common stock and are non-income producing. The purchase price and number of shares are subject to adjustment under certain conditions until the expiration date, if any.

(F)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks			
Communication Services	\$ 84,124	\$ -	\$—
Consumer Discretionary	42,015	_	_
Health Care	77,365	_	_
Industrials	2,423	_	_
Information Technology	328,908	21,324	_
Materials	1,127	_	_
Real Estate	8,700	_	_
Total Common Stocks	\$544,662	\$21,324	\$—
Warrants	_	_*	_
Corporate Debt Securities	_	293	_
Short-Term Securities	14,152	_	
Total	\$ 558,814	\$ 21,617	\$—

The following acronyms are used throughout this schedule:

ADR = American Depositary Receipts

REIT = Real Estate Investment Trust

## **Country Diversification**

## (as a % of net assets)

United States	80.1%
China	4.6%
India	4.3%
Netherlands	3.0%
Germany	2.5%
Taiwan	1.2%
South Korea	1.2%
Other Countries	0.7%
Other+	2.4%

<sup>+</sup>Includes liabilities (net of cash and other assets), and cash equivalents

(UNAUDITED)



Kenneth G. Gau

Below, Kenneth G. Gau, portfolio manager of Ivy VIP Small Cap Core, discusses positioning, performance and results for the fiscal year ended December 31, 2019. Mr. Gau has managed the Portfolio since 2014, and has 26 years of industry experience.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Small Cap Core (Class II shares at net asset value)	24.33%
Benchmark and Morningstar Category	
Russell 2000 Index (Generally reflects the performance of small-company stocks)	25.53%
Morningstar Small Blend Category Average (Generally reflects the performance of the universe of portfolios with similar investment objectives)	23.75%

Please note that Portfolio returns include applicable fees and expenses while index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

#### **Key factors**

In a vacuum, it was a good year for small cap stocks with the Russell 2000 Index, the Portfolio's benchmark, up 25.5% for the year ended December 31, 2019. Shifts in sentiment related to U.S.-China trade negotiations marked inflection points in the market throughout the year, which ultimately ended on a relative high note as the first phase of a deal was agreed to in principle in December. However, it is also important to keep in context that absent a severe drawdown in the fourth quarter of 2018 that returns would not look so rosy in 2019 as we have yet to recapture the highs the market saw in August of 2018, and more than 100% of the rebound in the index can be attributed to expanding valuations rather than earnings growth.

Also, from peak to trough in 2019, the yield on the 10-year U.S. Treasury note declined by more than 130 basis points, which inverted the yield curve in the process. A yield curve inversion historically has signaled an increased likelihood of an impending recession. While the curve has since recovered to a positive slope, it has been led by a combination of expectations of a bottoming in economic fundamentals (that have yet to clearly be manifested) and a dramatic reversal by the U.S. Federal Reserve (Fed), which cut rates three times and shifted from quantitative tightening to quantitative easing towards the end of 2019.

This move by the Fed was not unique only to the U.S. as many central bankers around the world have pumped liquidity into their markets hoping to arrest decelerating growth trends. How this will all work out going forward remains to be seen, as it is clearly out of the ordinary to see such stimulus when we are at full employment in the U.S. One thing for sure is that low or negative rates globally made equities a relatively attractive asset class, and drove them higher over the course of the year, accelerating into year end.

#### Contributors and detractors

Despite delivering a positive return, the Portfolio slightly lagged the benchmark for the period ended December 31, 2019. In many ways, the year could be broken down into what occurred before and after September.

Through the beginning of August, the yield on the U.S. 10-year Treasury drifted down, culminating with a marked acceleration downward exiting the month. The Portfolio was positioned well for this type of environment, with stable, defensive business models, which were favored across industries. Our stock selection in information technology, consumer discretionary and communication services helped drive significant outperformance through the end of August, led by PROS Holdings, Inc. and Vonage Holdings Corporation.

September brought about a rapid reversal in the 10-year Treasury, which triggered a sharp rotation in the types of stocks that led the benchmark. The low volatility, low-beta stocks that led the market in the first part of the year gave way to smaller, more cyclical, and in many cases, lower-quality stocks for the remainder of the year, with the stretched valuation gap between the two cohorts correcting to some extent.

This rotation took a toll on the relative performance of the Portfolio, as the significant lead developed versus the benchmark through late summer dwindled to a slight loss by year end, though we still ended up in the top half of the peer group as just 35% of portfolios outpaced the benchmark.

Stock selection became a drag post-August, as both factor-driven underperformance and stock specific issues arose, with the biggest drag coming from Vonage Holdings Corporation (execution, competition) and Grand Canyon Education, Inc. (political concerns.) For the full year, positive relative attribution was generated out of information technology (+2.4%), energy (+1.5%) and consumer discretionary (+1.0%). Conversely, negative relative attribution was based on performance from the financials (-2.9%), materials (-0.7%) and industrials (-0.4%) sectors.

#### Outlook

Looking forward to 2020, we hold to our view that the business cycle is still in its later stages. When it ends is hard to exactly predict, but we believe managing risk at this point is of great importance. While it might be true that this is a mini cycle that we just experienced (within a broader cycle) and this cycle could be longer than what has been experienced historically because of its lower slope and the size of the last recession, we do not believe that we will see a substantial reacceleration in global growth.

Not only do we believe that China — one of the biggest growth engines over the past decade — will experience moderated growth, we also believe global demographics are a headwind. In addition, interest rates are already very low across the world, leverage is high and considerable stimulus has already been exhausted in the form of major cut in taxes and significant amounts of deregulation.

How this all translates to equity returns remains to be seen, but it would seem logical if growth slows then returns followed suit. Independent of what the market holds, we believe our process of identifying quality, underappreciated companies coupled with thoughtful Portfolio construction will set us up to outperform our peers and benchmark over time.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Investing in small-cap growth and value stocks may carry more risk than investing in stocks of larger, more well-established companies. Growth stocks may be more volatile or not perform as well as value stocks or the stock market in general. Value stocks are stocks of companies that may have experienced adverse developments or may be subject to special risks that have caused the stocks to be out of favor and, in the opinion of the Portfolio's manager, undervalued. Such security may never reach what the manager believes to be its full value, or such security's value may decrease. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the Portfolio manager and are current only through the end of the period of the report as stated on the cover. The manager's views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and includes reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Small Cap Core.

ALL DATA AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	98.6%
Financials	17.4%
Information Technology	14.5%
Health Care	13.3%
Industrials	12.6%
Consumer Discretionary	11.3%
Consumer Staples	6.5%
Materials	6.3%
Real Estate	6.0%
Energy	4.4%
Utilities	3.2%
Communication Services	3.1%
Liabilities (Net of Cash and Other Assets), and Cash Equivalents+	1.4%

## **Top 10 Equity Holdings**

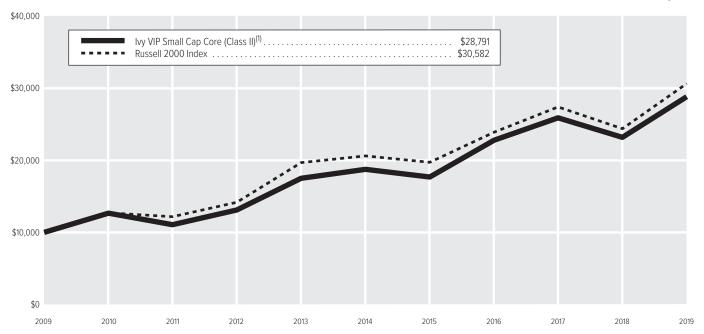
Company	Sector	Industry
Nomad Foods Ltd.	Consumer Staples	Packaged Foods & Meats
Chemed Corp.	Health Care	Health Care Services
Cardtronics plc, Class A	Information Technology	Data Processing & Outsourced Services
Visteon Corp.	Consumer Discretionary	Auto Parts & Equipment
Encompass Health Corp.	Health Care	Health Care Facilities
Webster Financial Corp.	Financials	Regional Banks
MGIC Investment Corp.	Financials	Thrifts & Mortgage Finance
Cogent Communications Group, Inc.	Communication Services	Alternative Carriers
Switch, Inc., Class A	Information Technology	IT Consulting & Other Services
Magnolia Oil & Gas Corp.	Energy	Oil & Gas Exploration & Production

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup> Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# COMPARISON OF CHANGE IN VALUE OF \$10,000 INVESTMENT SMALL CAP CORE

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class II
1-year period ended 12-31-19	24.33%
5-year period ended 12-31-19	9.02%
10-year period ended 12-31-19	11.15%

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Alternative Carriers – 3.1% Cogent Communications Group,	70	¢ 4.022
Inc	73 145	\$ 4,823 1,071
3 ( ,		5,894
Total Communication Services – 3.1	%	5,894
Consumer Discretionary		
Auto Parts & Equipment – 3.5% Visteon Corp. (A)	76	6,579
Casinos & Gaming – 0.6% Red Rock Resorts, Inc., Class A	49	1,173
Education Services – 1.4% Grand Canyon Education,	27	2.000
Inc. (A)	27	2,600
Footwear – 1.4% Skechers USA, Inc. (A)	61	2,620
Homebuilding – 0.8% TopBuild Corp. (A)	14	1,443
Leisure Products – 3.1%		
Polaris, Inc.	34	3,436
YETI Holdings, Inc. (A)(B)	69	2,392
		5,828
Specialized Consumer Services – 0. OneSpaWorld Holdings Ltd. (B)	5% 58	985
Total Consumer Discretionary – 11.3	%	21,228
Consumer Staples	,,,	- 1,220
Packaged Foods & Meats – 6.5%		
Nomad Foods Ltd. (A)	373	8,346
Sanderson Farms, Inc	10 44	1,767 2,116
Treeflouse Foods, Inc. (A)	77	12,229
		12,223
Total Consumer Staples – 6.5%		12,229
Energy		
Oil & Gas Exploration & Production – Magnolia Oil & Gas Corp. (A)	- 2.4% 354	4,448
Oil & Gas Refining & Marketing – 0.9 PBF Energy, Inc., Class A	9% 54	1,684
Oil & Gas Storage & Transportation -	- 1.1%	
Scorpio Tankers, Inc.	53	2,103
Total Energy – 4.4%		8,235
Financials		
Consumer Finance – 1.7%		
Encore Capital Group, Inc. (A)	93	3,280

COMMON STOCKS (Continued)	Shares	Value
Financial Exchanges & Data – 1.8%		
Morningstar, Inc	23	\$ 3,486
Multi-Line Insurance – 2.5%		
Assurant, Inc	14	1,870
Kemper Corp.	36	2,757
h		4,627
Property & Casualty Insurance – 2.1	%	
Argo Group International Holdings		
Ltd.	46	3,013
Old Republic International	41	922
Corp	41	
		3,935
Regional Banks – 6.2%		
First Horizon National Corp	159	2,631
TCF Financial Corp	65	3,053
Webster Financial Corp	112	5,982
		11,666
Thrifts & Mortgage Finance – 3.1%		
MGIC Investment Corp	406	5,754
mere investment corp.	.00	
Total Financials – 17.4%		22 740
		32,748
Health Care		
Health Care Equipment – 5.1%		
Envista Holdings Corp. (A)	100	2,965
Integer Holdings Corp. (A) NuVasive, Inc. (A)	19 32	1,515 2,446
Tandem Diabetes Care, Inc. (A)	46	2,757
, , ,		9,683
Health Care Facilities – 3.3%	0.0	0.470
Encompass Health Corp	89	6,176
Health Care Services – 4.1%		
Chemed Corp	18	7,704
Pharmaceuticals – 0.8%		
Intersect ENT, Inc. (A)	59	1,457
Total Health Care – 13.3%		25,020
Industrials		
Building Products – 1.0%		
Trex Co., Inc. (A)	21	1,843
Electrical Components & Equipment		1.020
EnerSys	26	1,939
Environmental & Facilities Services	- 1.1%	
Clean Harbors, Inc. (A)	23	1,972
Industrial Machinery – 5.0%	**	0
Crane Co	43	3,705
Gardner Denver Holdings, Inc. (A)	85	3,104
RBC Bearings, Inc. (A)	17	2,655
	••	
		9,464

	DECEN	IDER 31, Z
COMMON STOCKS (Continued)	Shares	Value
Research & Consulting Services – 2. ICF International, Inc.	1% 44	\$ 3,999
Security & Alarm Services – 1.3% Brink's Co. (The)	28	2,516
Trucking – 1.1% Knight Transportation, Inc	55	1,980
Total Industrials – 12.6%		23,713
Information Technology		
Application Software – 1.8% Q2 Holdings, Inc. (A)	43	3,459
Data Processing & Outsourced Servi Cardtronics plc, Class A (A) EVERTEC, Inc	ces – 5.1% 166 64	7,405 2,190 9,595
Electronic Equipment & Instruments Coherent, Inc. (A)	- 1.2% 13	2,239
IT Consulting & Other Services – 2.5 Switch, Inc., Class A	% 313	4,644
Semiconductor Equipment – 2.4% Brooks Automation, Inc Enphase Energy, Inc. (A)(B)	55 80	2,319 2,083 4,402
Systems Software – 1.5% Varonis Systems, Inc. (A)	37	2,860
Total Information Technology – 14.5	%	27,199
Materials		27,100
Aluminum – 1.3% Constellium N.V., Class A (A)	181	2,428
Diversified Chemicals – 1.8% Huntsman Corp.	143	3,464
Diversified Metals & Mining – 1.5% Compass Minerals International, Inc	46	2,792
Fertilizers & Agricultural Chemicals - Scotts Miracle-Gro Co. (The)	- 1.7% 29	3,116
Total Materials – 6.3%		11,800
Real Estate		
Diversified REITs – 0.6% Essential Properties Realty Trust, Inc	48	1,203
Hotel & Resort REITs – 1.5% Ryman Hospitality Properties, Inc	33	2,854

COMMON STOCKS (Continued)	Shares	١	/alue
Industrial REITs – 2.1% STAG Industrial, Inc.	127	\$	4,012
Retail REITs – 1.8% Agree Realty Corp	47	_	3,317
Total Real Estate – 6.0%			11,386
Utilities			
Electric Utilities – 1.2% ALLETE, Inc	29	_	2,366
Gas Utilities – 2.0% ONE Gas, Inc.	39	_	3,685
Total Utilities – 3.2%			6,051
TOTAL COMMON STOCKS – 98.6%		\$18	35,503
(Cost: \$168,256)			

SHORT-TERM SECURITIES	Shares	١	<b>V</b> alue
Money Market Funds (D) — 3.9% Dreyfus Institutional Preferred Government Money Market Fund — Institutional Shares, 1.550% (C)	4,768	\$	4,768
Fund – Premier Class, 1.550%	2,480	_	2,480 7,248
TOTAL SHORT-TERM SECURITIES –	- 3.9%	\$	7,248
(Cost: \$7,248)			
TOTAL INVESTMENT SECURITIES -	102.5%	\$1	192,751
(Cost: \$175,504)			
LIABILITIES, NET OF CASH AND OT ASSETS – (2.5)%	HER		(4,735)
NET ASSETS – 100.0%		\$1	88,016

#### Notes to Schedule of Investments

(A)No dividends were paid during the preceding 12 months.

(B)All or a portion of securities with an aggregate value of \$4,705 are on loan.

(C)Investment made with cash collateral received from securities on loan.

(D)Rate shown is the annualized 7-day yield at December 31, 2019.

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks	\$185,503	\$—	\$—
Short-Term Securities	7,248	_	
Total	\$ 192,751	\$-	\$-

The following acronym is used throughout this schedule:

REIT = Real Estate Investment Trust

(UNAUDITED)



Kenneth G. McQuade



Timothy J. Miller



Bradley P. Halverson

# Below, Bradley P. Halverson, CFA, Kenneth G. McQuade and Timothy J. Miller, CFA, co-portfolio managers of Ivy VIP Small Cap Growth, discuss positioning, performance and results for the fiscal year ended December 31, 2019. Mr. McQuade has managed the Portfolio since 2006 and has 21 years of investment experience. Mr. Halverson and Mr. Miller assumed co-manager responsibility in 2016 and they have 18 years and 40 years of industry experience, respectively.

#### **Fiscal Year Performance**

For the 12 Months Ended December 31, 2019	
Ivy VIP Small Cap Growth (Class II shares at net asset value)	23.37%
Benchmark and Morningstar Category	
Russell 2000 Growth Index (Generally reflects the performance of small-company stocks)	28.48%
Morningstar Small Growth Category Average (Generally reflects the performance of the universe of portfolios with similar investment objectives)	27.68%

Please note that Portfolio returns include applicable fees and expenses while index returns do not include any such fees. Also, the Portfolio's performance data does not take into account any product expenses or charges associated with owning a variable life or annuity policy, which is invested in Ivy Variable Insurance Portfolios.

## **Key factors**

A strong domestic stock market year across the board for the year ended Dec. 31, 2019 was led by mid- and large-capitalization stocks, but small-cap stocks also delivered healthy returns for the period. For the year, small-cap growth stocks outperformed small-cap value stocks. The profile of performance for the year was divided into three segments driven by macro factors influencing the market.

The first segment was a strong move upward from the beginning of the year until early May. Economic activity remained strong while the U.S. Federal Reserve (Fed) turned dovish allowing interest rates to decline and risk assets to perform well. This momentum was halted in May as the U.S. raised tariffs on \$250 billion of Chinese imports, as well as threatening tariffs on Mexico, triggering renewed fear of harmful trade disputes. Issues related to the United Kingdom's pending exit from the European Union also raised concerns about the global economic direction. The result was an initial sharp correction followed by a flattish pattern through the summer.

The final period was another sharp rally from early October through the end of the year. The Fed cut interest rates for the first time in years in reaction to an inverted yield curve, which sparked recession fears. The markets responded favorably as the whole term structure of rates continued to fall and as signs of trade progress were evident.

The second half of the fiscal year was particularly challenging for the small-cap growth segment of the market. Biotechnology stocks were the best performers by a wide margin. The industry accounted for 13% of the Russell 2000 Growth Index, the Portfolio's benchmark, when the index was rebalanced. This group advanced a whopping 32% in the fourth quarter, accounting for one-third of the benchmark's return for that period.

Another headwind for growth stocks was a sharp rotation to lower quality and value stocks during the period. This latter move was in response to the combination of the Fed lowering short-term rates and a China trade agreement, igniting a rally in many depressed cyclical stocks such as machinery, materials and automobiles.

#### **Contributors and detractors**

Despite delivering a positive return for the year, the Portfolio lagged the benchmark for the year, with most of the shortfall occurring in the second half of the year. The Portfolio had significant outperformance through June during the market's initial rally. The outperformance during this first half was attributable to the information technology, consumer discretionary, and industrial sectors. Within those sectors, the software stocks were leaders in information technology; housing, internet retail and specialty retail stocks led consumer discretionary; and machinery, aerospace and truckers led the industrial sector. Notable winners included Paycom Software, Inc., Booz Allen Hamilton Holding Corporation, Carvana Group, LLC and JBT Corporation.

The second half of the year proved challenging for the Portfolio, accounting for the underperformance for the year. Two general factors accounted for the shortfall. First, the environment for growth managers during the second half of the year was quite unfavorable, with the index performance being driven by more speculative biotechnology stocks and a rally in low-quality cyclical stocks. These groups do not generally fit our investment process, and are therefore underexposed in the Portfolio. Fortunately, history shows these periods of outperformance from these groups are short-lived, and in the case of the cyclical stocks, tend to do best coming out of a recession, which is not the environment that exists. The second factor was a slate of stock-specific issues that led to outsized negative reactions from the market given the prevailing sentiment against growth stocks. Among these were shortfalls from CareDx, Inc., Merit Medical Systems, Inc., Pluralsight, Inc. and Grand Canyon Education, Inc.

Information technology was a notable contributor to performance during 2019. The Portfolio was overweight the sector, which outperformed the benchmark, and stock selection exceeded the sector performance. Software was a key contributor, with cloud adoption and automation driving companies globally to enable workforces to become increasingly mobile while making their operations more efficient. Paycom Software, Inc., Proofpoint, Inc., Globant SA and Five9, Inc. positively contributed during the year, delivering consistent results. Conversely, detractors Pluralsight, Inc. and New Relic, Inc. had sales force execution challenges, which modestly offset the overall positive contribution.

Also within the sector, the IT services segment was an area of strength as both Booz Allen Hamilton Holding Corporation and Interxion Holding N.V. both delivered strong performance. Despite healthy contributions from semiconductors stock Monolithic Power Systems, Inc., the Portfolio lagged the industry due to an underweight position in the space. We remain overweight in the information technology sector and continue to focus on identifying companies attached to strong secular trends that can deliver multi-year outperformance.

Within the health care sector, the Portfolio underperformed the benchmark for the year due primarily to the previously noted performance within the biotechnology segment. This industry produced a 44% annual return, which was the best performing segment within the health care sector, and one of the best segments anywhere. We consistently underweight biotechnology given the more binary risk profile usually centered around clinical data or drug approval for typically single-product companies. In addition, their usual unprofitability and lack of operational history also does not fit our investment process.

We attempt to find similar growth in other health care industries, such as medical equipment and health care technology. These segments did not perform anywhere close to biotechnology for the year, which created a weighting issue. Certain holdings within the medical equipment and health care technology segments exhibited poor execution, including Inogen, Inc., Merit Medical Systems, Inc. and Evolent Health, Inc., further setting the Portfolio back from the biotechnology returns.

"Medicare-for-all" spurred concerns periodically throughout the year and will likely do the same in 2020 as the presidential election nears. However, the pressures on drug pricing will probably maintain greater fundamental risks for health care stocks. We believe we are less exposed to drug pricing risk due to our investment process, but all health care can be subject to the rhetoric of regulation changes. Meanwhile, most Americans still have access to health care insurance so we think that the percentage of insured patients should remain stable while any significant regulation enactment should be nonexistent until after the November election.

We think that this stable environment should result in slow but steady health care growth, possibly in the lower single-digits, slightly higher than gross domestic product (GDP) growth. Health care's minimal exposure to cyclical slowdown and trade war risks make the sector more appealing if macro concerns escalate. Insurers are also accelerating the shift to more cost-effective settings and procedures, such as ambulatory, in-office and home-based treatments. We continue to gravitate to novel products and services that facilitate the trend away from costly hospitals.

We finished the year in line with industrials. The Portfolio benefitted from the continued economic growth, housing related strengths and a strong aerospace cycle. Factors detracting from performance include the pressures of trade wars and the tight labor market. With an economy still buoyed by low interest rates, low taxes and strong business sentiment,

manufacturing is expected to continue to grow, especially if trade relationships improve. We remain invested in multiple specialty industrial segments anticipated to have greater growth than GDP with overweight exposure to aerospace and defense, building supplies and transportation.

#### Outlook

The macro headwinds faced in the second half of the year should ease as we move through 2020. Small cap stocks in general should benefit from better earnings growth. Interest rate declines are likely behind us at this point, but they are not expected to rise significantly in 2020, a scenario that is beneficial for growth stocks.

The 2020 elections undoubtedly will generate some volatility for the market and certain sectors, but ultimately it is the companies that deliver or exceed expectations that will prevail. Our focus remains on identifying the companies best positioned to capitalize on large market opportunities for sustained multi-year growth.

Past performance is not a guarantee of future results. The value of the Portfolio's shares will change, and you could lose money on your investment.

Investing in small-cap stocks may carry more risk than investing in stocks of larger more well-established companies. Prices of growth stocks may be more sensitive to changes in current and expected earnings than the prices of other stocks. Growth stocks may not perform as well as value stocks or the stock market in general. The Portfolio may invest in Initial Public Offerings (IPOs), which can have a significant positive impact on the Portfolio's performance that may not be replicated in the future. These and other risks are more fully described in the Portfolio's prospectus.

The opinions expressed in this report are those of the Portfolio managers and are current only through the end of the period of the report as stated on the cover. The managers' views are subject to change at any time based on market and other conditions, and no forecasts can be guaranteed.

The index noted is unmanaged and includes reinvested dividends. One cannot invest directly in an index, nor is an index representative of Ivy VIP Small Cap Growth.

ALL DATA AS OF DECEMBER 31, 2019 (UNAUDITED)

#### **Asset Allocation**

Stocks	95.3%
Information Technology	25.7%
Health Care	22.6%
Industrials	19.2%
Consumer Discretionary	13.9%
Financials	6.4%
Communication Services	2.7%
Consumer Staples	2.7%
Energy	1.7%
Real Estate	0.4%
Liabilities (Net of Cash and Other Assets), and Cash	
Equivalents+	4.7%

## **Top 10 Equity Holdings**

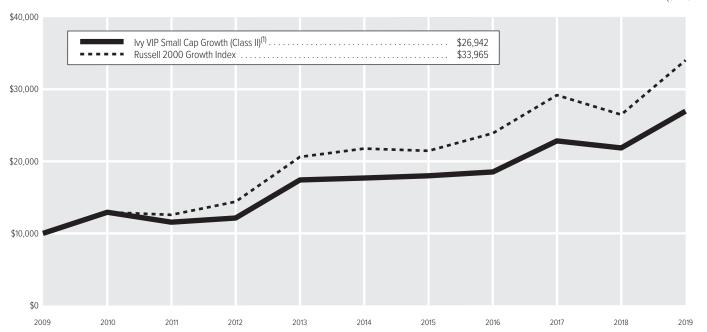
,		
Company	Sector	Industry
Teladoc Health, Inc.	Health Care	Health Care Services
Nexstar Broadcasting Group, Inc.	Communication Services	Broadcasting
Five9, Inc.	Information Technology	Application Software
Mercury Computer Systems, Inc.	Industrials	Aerospace & Defense
Insulet Corp.	Health Care	Health Care Equipment
InterXion Holding N.V.	Information Technology	IT Consulting & Other Services
Clean Harbors, Inc.	Industrials	Environmental & Facilities Services
Grand Canyon Education, Inc.	Consumer Discretionary	Education Services
Tactile Systems Technology, Inc.	Health Care	Health Care Equipment
Woodward, Inc.	Industrials	Industrial Machinery

See your advisor or www.ivyinvestments.com for more information on the Portfolio's most recently published Top 10 Equity Holdings.

<sup>+</sup> Cash equivalents are defined as highly liquid securities with maturities of less than three months. Cash equivalents may include U.S. Government Treasury bills, bank certificates of deposit, bankers' acceptances, corporate commercial paper and other money market instruments.

# COMPARISON OF CHANGE IN VALUE **OF \$10,000 INVESTMENT**

(UNAUDITED)



(1)The value of the investment in the Portfolio is impacted by the ongoing expenses of the Portfolio and assumes reinvestment of dividends and distributions.

Average Annual Total Return <sup>(2)</sup>	Class I	Class II
1-year period ended 12-31-19	23.68%	23.37%
5-year period ended 12-31-19	_	8.84%
10-year period ended 12-31-19	_	10.42%
Since Inception of Class through 12-31-19 <sup>(3)</sup>	7.31%	_

(2)Data quoted is past performance and current performance may be lower or higher. Past performance is no guarantee of future results. Investment return and principal value of an investment will fluctuate and shares, when redeemed, may be worth more or less than their original cost. Please visit www.ivyinvestments.com for the Portfolio's most recent month-end performance. Performance data quoted does not reflect any expenses or charges associated with owning a variable life insurance policy or variable annuity contract that invests in the Portfolio's shares. When such charges are deducted, actual investment performance in a variable policy or contract will be lower.

(3)11-5-18 (the date on which shares were first acquired by shareholders).

Past performance is not necessarily indicative of future performance. Indexes are unmanaged. The performance graph and table do not reflect the deduction of taxes that a shareholder would pay on Portfolio distributions or on the redemption of Portfolio shares. Performance results may include the effect of expense reduction arrangements for some or all of the periods shown. If those arrangements had not been in place, the performance results for those periods would have been lower.

COMMON STOCKS	Shares	Value
Communication Services		
Broadcasting — 2.7% Gray Television, Inc. (A) Nexstar Broadcasting Group, Inc	52 81	\$ 1,109 9,505 10,614
Total Communication Services – 2.7%		10,614
Consumer Discretionary		
Apparel Retail – 0.6% Boot Barn Holdings, Inc. (A)	50	2,239
Auto Parts & Equipment – 0.9% Fox Factory Holding Corp. (A)	52	3,622
Casinos & Gaming – 1.6% Churchill Downs, Inc	32 150	4,403 1,822 6,225
Distributors – 1.0% Pool Corp.	19	3,957
Education Services $-1.8\%$ Grand Canyon Education, Inc. (A)	74	7,073
General Merchandise Stores – 0.5% Ollie's Bargain Outlet Holdings, Inc. (A)	32	2,079
Homebuilding – 2.4% Installed Building Products, Inc. (A) TopBuild Corp. (A)	94 28	6,495 2,887 9,382
Hotels, Resorts & Cruise Lines – 1.2% Hilton Grand Vacations, Inc. (A)	130	4,461
Leisure Facilities – 1.5% SeaWorld Entertainment, Inc. (A)	182	5,784
Leisure Products – 0.7% Malibu Boats, Inc., Class A (A)	70	2,880
Restaurants – 1.7% Wingstop, Inc.	76	6,570
Total Consumer Discretionary – 13.9%		54,272
Consumer Staples		
Packaged Foods & Meats – 2.7% J&J Snack Foods Corp	28 239	5,098 5,336 10,434
Total Consumer Staples – 2.7%		10,434

COMMON STOCKS (Continued)	Shares	Value
Energy		
Oil & Gas Equipment & Services – 0.99	6	
Cactus, Inc., Class A	56	\$ 1,909
Dril-Quip, Inc. (A)	36	1,679
		3,588
Oil & Gas Exploration & Production – 0	.8%	
Matador Resources Co. (A)	166	2,985
Total Energy – 1.7%		6,573
Financials		
Asset Management & Custody Banks -	0.7%	
Hamilton Lane, Inc., Class A		2,796
Insurance Brokers – 1.2%		
eHealth, Inc. (A)	49	4,700
Investment Banking & Brokerage – 2.2	2%	
Houlihan Lokey, Inc	36	1,759
LPL Investment Holdings, Inc	74	6,861
		8,620
Regional Banks – 1.2%		
Seacoast Banking Corp. of		
Florida (A)	146	4,457
Thrifts & Mortgage Finance – 1.1%	00	4.105
Essent Group Ltd	80	4,165
Total Financials – 6.4%		24,738
		24,730
Health Care		
Biotechnology – 1.3%	300	5,220
Vericel Corp. (A)	300	
Health Care Distributors – 1.3%		
PetIQ, Inc. (A)	203	5,075
Hoalth Caro Equipment C 00/		
Health Care Equipment – 6.9% Insulet Corp. (A)	46	7,915
iRhythm Technologies, Inc. (A)	30	2,047
NovoCure Ltd. (A)	33	2,764
Penumbra, Inc. (A)	30	4,856
Tactile Systems Technology, Inc. (A)	104	7,042
Veracyte, Inc. (A)	76	2,123
,, , ,	, ,	26,747
		20,747
Health Care Services – 6.3%	~ 4	F 000
AMN Healthcare Services, Inc. (A)	91	5,686
LHC Group, Inc. (A)	43 156	5,867
Teladoc Health, Inc. (A)(B)	156	13,102
		24,655
Health Care Supplies – 1.2%		
STAAR Surgical Co. (A)	133	4,688
	.55	,000

COMMON STOCKS (Continued)	Shares	Value
Health Care Technology – 4.3%		
CareDx, Inc. (A)	312	\$ 6,721
HMS Holdings Corp. (A)	165	4,890
	61	
Omnicell, Inc. (A)	ы	4,954
		16,565
Managed Health Care – 1.3%		
HealthEquity, Inc. (A)	66	4,886
Treatmequity, me. (A)	00	
Total Health Care – 22.6%		87,836
Industrials		
Aerospace & Defense – 2.1%		
Mercury Computer Systems, Inc. (A)	122	8,413
Air Freight & Logistics – 1.4%		
Air Transport Services Group,		
Inc. (A)	230	5,386
Building Products – 1.3%		
PGT Innovations, Inc. (A)	198	2,951
	23	
Trex Co., Inc. (A)	23	2,071
		5,022
Electrical Components & Equipment –	1 3%	
EnerSys	67	4,993
Elicisys	07	
Environmental & Facilities Services – 1	.9%	
Clean Harbors, Inc. (A)	85	7,303
Industrial Machinery – 7.6%		
Crane Co	55	4,792
John Bean Technologies Corp	62	6,979
RBC Bearings, Inc. (A)	29	4,570
Timken Co. (The)	110	6,177
Woodward, Inc.	59	7,005
		29,523
Security & Alarm Services – 1.8%		
Brink's Co. (The)	77	6,956
Brille 3 co. (Tric)	,,	
Trading Companies & Distributors $-0$ .	5%	
GMS, Inc. (A)	77	2,094
Trucking – 1.3%		
Knight Transportation, Inc	143	5,140
Total Industrials – 19.2%		74,830
Information Technology		
Application Software – 12.2%		
Envestnet, Inc. (A)	73	5,054
Five9, Inc. (A)	130	8,551
Globant S.A. (A)	54	5,688
HubSpot, Inc. (A)	25	
		4,024
Mimecast Ltd. (A)	159	6,919
Paycom Software, Inc. (A)	13	3,450
Pluralsight, Inc., Class A (A)	197	3,383

COMMON STOCKS (Continued)	Shares	Value
Application Software (Continued) Q2 Holdings, Inc. (A)	83 82	\$ 6,706 3,695 47,470
$\label{eq:communications} \begin{tabular}{ll} Communications Equipment $-1.1\%$\\ Viavi Solutions, Inc. (A) $$\dots$$.} \end{tabular}$	273	4,097
Data Processing & Outsourced Service EVO Payments, Inc., Class A (A)		% 4,091
Electronic Equipment & Instruments - Coherent, Inc. (A)		4,687
Internet Services & Infrastructure – 1. 8x8, Inc. (A)	.2% 245	4,486
IT Consulting & Other Services – 3.1% Booz Allen Hamilton Holding Corp	65 90	4,605 7,580 12,185
Semiconductor Equipment – 0.8% Enphase Energy, Inc. (A)(B)	122	3,185
Semiconductors – 1.7% Monolithic Power Systems, Inc	37	6,658
Systems Software – 3.4% Proofpoint, Inc. (A)	61 80	6,978 6,195 13,173
Total Information Technology – 25.79	%	100,032
Real Estate		
$\label{eq:health Care REITs} \begin{tabular}{ll} Health Care REITs - 0.4\% \\ Community Healthcare Trust, Inc. \end{tabular}$	34	1,449
Total Real Estate – 0.4%		1,449
TOTAL COMMON STOCKS – 95.3%		\$370,778
(Cost: \$282,748)		

SHORT-TERM SECURITIES	Shares	Valu	ıe
Money Market Funds (D) — 4.9% Dreyfus Institutional Preferred Government Money Market Fund — Institutional Shares, 1.550% (C)	,	17	,607 ,391 998
TOTAL SHORT-TERM SECURITIES –	4.9%	\$18,9	98
(Cost: \$18,998)			
TOTAL INVESTMENT SECURITIES -	100.2%	\$389	,776
(Cost: \$301,746)			
LIABILITIES, NET OF CASH AND OTH ASSETS – (0.2)%	HER	(	833)
NET ASSETS – 100.0%		\$388.	943

#### Notes to Schedule of Investments

\*Not shown due to rounding.

(A)No dividends were paid during the preceding 12 months.

(B)All or a portion of securities with an aggregate value of \$13,293 are on loan.

(C)Investment made with cash collateral received from securities on loan.

(D)Rate shown is the annualized 7-day yield at December 31, 2019.

The following total return swap agreements were outstanding at December 31, 2019:

							Upfront	
			Maturity	Notional	Financing		Payments/	Unrealized
Underlying Security	Long/Short	Counterparty	Date	Amount	Fee(1)(2)	Value	(Receipts)	Appreciation
Biotech Custom Index	Long	Goldman Sachs International	07/02/2020	\$11,066	1-Month LIBOR plus 2.5 bps	\$609	\$—	\$609

(1)The Portfolio pays the financing fee multiplied by the notional amount if long on the swap agreement. If the Portfolio is short on the swap agreement, the Portfolio receives the financing fee multiplied by the notional amount.

(2)At the termination date, a net cash flow is exchanged where the market-linked total return is equivalent to the return of the underlying security less a financing rate, if any. If the Portfolio is long on the swap agreement, the Portfolio would receive payments on any net positive total return, and would owe payments in the event of a negative total return. If the Portfolio is short on the swap agreement, the Portfolio would owe payments on any net positive total return, and would receive payments in the event of a negative total return.

The following table represents security positions within the total return basket swap as of December 31, 2019:

Reference Entity	Share	Notiona s Amoun		% of Value	Reference Entity S		Notional Amount \	/alue	% of Value	Reference Entity S		Notional Amount \	√alue	% of Value
Global Blood Therapeutics,					Momenta Pharmaceuticals,					Dicerna Pharmaceuticals,				
Inc	*	\$662	\$ 36	6.0%	Inc	_*	\$ 157	\$ 9	1.4%	Inc	_*	\$ 92	\$ 5	0.8%
Arrowhead Pharmaceuticals	ŝ,				Natera, Inc.	_*	151	8	1.4	Exact Sciences Corp	_*	91	5	0.8
Inc	*	472	26	4.2	Insmed, Inc		150	8	1.4	Enanta Pharmaceuticals,				
ACADIA Pharmaceuticals,					Biohaven Pharmaceutical					Inc	_*	86	5	0.8
Inc	*	364	20	3.3	Holding Co. Ltd	_*	148	8	1.3	Aerie Pharmaceuticals,				
Repligen Corp	*	355	20	3.2	Pacira BioSciences, Inc	_*	148	8	1.3	Inc	_*	83	5	0.8
Blueprint Medicines					ArQule, Inc.	_*	147	8	1.3	Fate Therapeutics, Inc	_*	82	5	0.7
Corp	*	316	17	2.9	Arena Pharmaceuticals,					Allogene Therapeutics,				
Immunomedics, Inc		273	15	2.5	Inc	_*	147	8	1.3	Inc	_*	82	4	0.7
Mirati Therapeutics, Inc	*	262	14	2.4	Heron Therapeutics, Inc	_*	139	8	1.3	Athenex, Inc	_*	74	4	0.7
MyoKardia, Inc.	*	258	14	2.3	Reata Pharmaceuticals,					Innoviva, Inc	_*	73	4	0.7
Iovance Biotherapeutics,					Inc	_*	139	8	1.3	Radius Health, Inc	_*	73	4	0.7
Inc	. 1	257	14	2.3	Allakos, Inc		132	7	1.2	Vanda Pharmaceuticals,				
Intercept Pharmaceuticals,					Portola Pharmaceuticals,					Inc	_*	69	4	0.6
Inc	*	245	14	2.2	Inc	_*	128	7	1.2	NanoString Technologies,				
FibroGen, Inc	*	242	13	2.2	Xencor, Inc	_*	126	7	1.1	Inc	_*	69	4	0.6
PTC Therapeutics, Inc	*	222	12	2.0	Esperion Therapeutics,					Codexis, Inc.	_*	67	4	0.6
Audentes Therapeutics,					Inc	_*	120	7	1.1	Denali Therapeutics, Inc		67	4	0.6
Inc	*	209	12	1.9	Editas Medicine, Inc		120	7	1.1	Tricida, Inc.		66	4	0.6
Halozyme Therapeutics,					Apellis Pharmaceuticals,					TG Therapeutics, Inc		63	3	0.6
Inc	. 1	205	11	1.9	Inc	_*	119	7	1.1	Vericel Corp		62	3	0.6
Emergent BioSolutions,					Aimmune Therapeutics,					ZIOPHARM Oncology,				
Inc	*	201	11	1.8	Inc	_*	119	7	1.1	Inc	1	61	3	0.6
Axsome Therapeutics,					Ra Pharmaceuticals, Inc	_*	117	6	1.1	Atara Biotherapeutics,				
Inc	*	197	11	1.8	Epizyme, Inc	_*	114	6	1.0	Inc	_*	59	3	0.5
Ultragenyx Pharmaceutical,					Invitae Corp		113	6	1.0	Madrigal Pharmaceuticals,				
Inc		188	10	1.7	REGENXBIO, Inc.		110	6	1.0	Inc	_*	57	3	0.5
Amicus Therapeutics,					Veracyte, Inc		107	6	1.0	Amphastar				
Inc	. 1	181	10	1.6	Corcept Therapeutics,					Pharmaceuticals, Inc	_*	56	3	0.5
Zogenix, Inc.		180	10	1.6	Inc.	_*	96	5	0.9	Sangamo Therapeutics,				
Ironwood Pharmaceuticals,	-				Supernus Pharmaceuticals,			-		Inc	_*	54	3	0.5
Inc.	. 1	163	9	1.5	Inc.	_*	94	5	0.9	Heska Corp.		54		0.5
Medicines Co. (The)		160	9		Theravance Biopharma,		٠.	9	0	Pacific Biosciences of		٠.	0	0.0
Acceleron Pharma, Inc		157	9		Inc	_*	92	5	0.8	California, Inc.	1	54	3	0.5
,	-	.57	9						0	23,		٠.	0	0.0

Reference Entity	Shares	Notional s Amount \	√alue	% of Value	Reference Entity	Share	Notiona s Amount	% c ue Valı		Reference Entity	Shares	Notional Amount		% of ue Value
Omeros Corp	*	\$ 53 5	\$ 3	0.5%	Phibro Animal Health					Stemline Therapeutics,				
UroGen Pharma Ltd	*	51	3	0.5	Corp	*	\$ 39	\$ 2 0.3	1%	Inc	*	\$ 34	\$	2 0.3%
Adverum Biotechnologies,					Cara Therapeutics, Inc	*	39	2 0.3		Spectrum Pharmaceuticals	,			
Inc	. —*	49	3	0.4	PetIQ, Inc.	*	38	2 0.3		Inc	*	30		2 0.3
Retrophin, Inc	*	46	3	0.4	Accelerate Diagnostics,					AnaptysBio, Inc.	*	27		1 0.2
ANI Pharmaceuticals,					Inc	*	37	2 0.3		Voyager Therapeutics,				
Inc	*	46	3	0.4	Amneal Pharmaceuticals,					Inc	*	27		1 0.2
G1 Therapeutics, Inc	. —*	43	2	0.4	Inc	*	36	2 0.3					\$60	-
Clovis Oncology, Inc	*	40	2	0.4	Twist Bioscience Corp	*	35	2 0.3					<u> </u>	<del>"</del>

The following table is a summary of the valuation of the Portfolio's investments by the fair value hierarchy levels as of December 31, 2019. See Note 3 to the Financial Statements for further information regarding fair value measurement.

	Level 1	Level 2	Level 3
Assets			
Investments in Securities			
Common Stocks	\$370,778	\$ -	\$—
Short-Term Securities	18,998	_	_
Total	\$389,776	\$ -	\$—
Total Return Swaps	\$ -	\$609	\$—

The following acronym is used throughout this schedule:

REIT = Real Estate Investment Trust

AS OF DECEMBER 31, 2019

(In thousands, except per share amounts)	Asset Strategy <sup>(1)</sup>	Balanced	Energy	Growth	High Income	International Core Equity	Mid Cap Growth
ASSETS							
Investments in unaffiliated securities at value+^ Investments in affiliated securities at value+	\$725,988	\$ 340,215	\$ 41,309	\$790,722	\$ 875,482 949	\$ 697,012	\$ 547,407
Bullion at value+	44,344	_	_	_	— —	_	_
Investments at Value	770,332	340,215	41,309	790,722	876,431	697,012	547,407
Cash	291	_	_	_	1,776	_	_
Cash denominated in foreign currencies at value+ Investment securities sold receivable	_ 23	_	_	_	93	2,024 442	
Dividends and interest receivable	3,026	982	28	 525	11,883	2,240	691 119
Capital shares sold receivable	262	4	360	89	340	22	506
Receivable from affiliates	_	_	_	_	_	_	116
Receivable from securities lending income — net Prepaid and other assets	1 9	1 4	* *		7 11	5 5	1
Total Assets	773,944	341,206	41,697	791,356	890,541	701,750	548,843
LIABILITIES		<u> </u>	<u> </u>		·	<u> </u>	
Cash collateral on securities loaned at value	616	_	_	_	2,193	76	_
Investment securities purchased payable	58	_	_	_	2,055	1,256	961
Capital shares redeemed payable Independent Trustees and Chief Compliance Officer fees	452	256	27	328	293	368	250
payable	163	92	9	287	85	83	37
Distribution and service fees payable	5	2	*	•	6	5	2
Shareholder servicing payable Investment management fee payable	1 15	1 7	_* 1	' 1 15	1 15	1 16	1 13
Accounting services fee payable Unrealized depreciation on forward foreign currency	17	8	2	17	18	14	12
contracts	_	_	_	_	_	833	_
Other liabilities	9	1	1	2	2	21	1
Total Liabilities	1,336	367	40	656	4,668	2,673	1,277
Commitments and Contingencies (See Note 2 and Note 13)							
Total Net Assets	\$772,608	\$340,839	\$ 41,657	\$790,700	\$885,873	\$699,077	\$547,566
NET ASSETS							
Capital paid in (shares authorized — unlimited) Accumulated earnings gain (loss)	\$ 702,160 70,448	\$ 274,562 66,277	\$ 92,530 (50,873)		\$942,590 (56,717)	\$ 691,083 7,994	\$363,983 183,583
Total Net Assets	\$772,608	\$340,839	\$ 41,657	\$790,700	\$885,873	\$699,077	\$547,566
CAPITAL SHARES OUTSTANDING:							
Class I	35	N/A	47	N/A	7,827	N/A	18,254
Class II	81,292	41,463	10,368	69,810	247,531	44,662	24,794
NET ASSET VALUE PER SHARE:							
Class I Class II	\$ 9.50 \$ 9.50	N/A \$ 8.22		N/A \$ 11.33		N/A \$ 15.65	\$ 12.77 \$ 12.69
+COST							
Investments in unaffiliated securities at cost Investments in affiliated securities at cost	_	\$295,502 —	\$ 54,184 —	\$544,500 —	\$ 916,579 1,090	\$702,524 —	\$402,874 —
Bullion at cost Cash denominated in foreign currencies at cost	36,084 —	_	_	_	_		_ _
^Securities loaned at value	5,144	602	_	_	1,918	72	3,229
****	2,	002			.,0.0		-,

<sup>\*</sup>Not shown due to rounding.

(1)Consolidated Statement of Assets and Liabilities (See Note 5 in Notes to Financial Statements).

See Accompanying Notes to Financial Statements.

AS OF DECEMBER 31, 2019

(In thousands, except per share amounts)	Natural Resources	Science and Technology	Small Cap Core	Small Cap Growth
ASSETS	¢ 00 000	¢	¢ 100 7F1	¢ 200 770
Investments in unaffiliated securities at value+^	\$ 90,882 <b>90,882</b>	\$ 580,431	\$ 192,751	\$ 389,776
	*	580,431	192,751	389,776
Cash denominated in foreign currencies at value+ Restricted cash	610	_	_	_
Investment securities sold receivable	504	144	193	686
Dividends and interest receivable	60	290	138	78
Capital shares sold receivable Receivable from affiliates	38	228	141	61 38
Swap agreements, at value	_	_	_	609
Receivable from securities lending income — net	*	1	14	3
Prepaid and other assets	1	6	2	4
Total Assets	92,095	581,100	193,239	391,255
LIABILITIES				
Cash collateral on securities loaned at value	2,806	_	4,768	1,607
Investment securities purchased payable Capital shares redeemed payable	654 101	— 548	378 31	224 333
Independent Trustees and Chief Compliance Officer fees payable	18	96	33	125
Distribution and service fees payable	1	4	1	2
Shareholder servicing payable	_*	1	_*	
Investment management fee payable Accounting services fee payable	2 4	14 13	4 6	9 10
Unrealized depreciation on forward foreign currency contracts	901	—	_	—
Other liabilities	*	1	2	1
Total Liabilities	4,487	677	5,223	2,312
Commitments and Contingencies (See Note 2 and Note 13)				
Total Net Assets	\$ 87,608	\$580,423	\$188,016	\$388,943
NET ASSETS				
Capital paid in (shares authorized — unlimited)	\$ 148,100	\$ 293,113		\$ 301,428
Accumulated earnings gain (loss)	(60,492)	287,310	25,815	87,515
Total Net Assets	\$ 87,608	\$580,423	\$188,016	\$388,943
CAPITAL SHARES OUTSTANDING:				
Class I	N/A	32	N/A	6,547
Class II	22,797	19,435	13,710	37,757
NET ASSET VALUE PER SHARE: Class I	N/A	\$ 29.94	N/A	\$ 8.80
Class II	\$ 3.84	\$ 29.82	\$ 13.71	
+COST Investments in unaffiliated securities at cost	¢100 4F2	¢ 21E 202	¢ 17E E∩4	¢ 201746
Cash denominated in foreign currencies at cost	\$100,453 _*	\$ 315,302 —	\$ 175,504 —	\$ 301,746 —
^Securities loaned at value	2,719	5,497	4,705	13,293
* Not shown due to rounding.	2,713	5, 157	1,700	10,200
riot shown ade to rounding.				

FOR THE YEAR ENDED DECEMBER 31, 2019

(In thousands)	Asset Strategy <sup>(1)</sup>	Balanced	Energy	Growth	High Income	International Core Equity	Mid Cap Growth
INVESTMENT INCOME Dividends from unaffiliated securities Foreign dividend withholding tax Interest and amortization from unaffiliated securities Interest and amortization from affiliated securities	\$ 10,905 (879) 12,711	\$ 4,246 (10) 3,627	\$ 690 (10) 28	\$ 7,010 (14) 138	\$ 1,945 — 64,410 77	\$ 22,670 (2,002) 1,025	\$ 3,019 — 201
Securities lending income — net	104	13	_ 5	21	138	199	20
Total Investment Income	22,841	7,876	713	7,155	66,570	21,892	3,240
EXPENSES Investment management fee Distribution and service fees:	5,392	2,304	354	5,295	5,461	6,016	4,248
Class II Shareholder servicing:	1,925	823	104	1,891	2,114	1,769	714
Class I	_*	14// (	_*	,	1	N/A	2
Class II	30	11	4	22	26	19	15
Custodian fees Independent Trustees and Chief Compliance Officer fees	54 51	8 25	4	14 60	17 53	87 43	11 27
Accounting services fee	200	96	28	192	214	167	135
Professional fees	75	33	26	35	60	52	30
Commitment and interest expense for borrowing	_	_	_	_	41	_	_
Other	133	21	13	38	66	60	34
Total Expenses	7,860	3,321	536	7,547	8,053	8,213	5,216
Less:	*						(200)
Expenses in excess of limit			-	7.547	- 0.052	0.242	(260)
Total Net Expenses	7,860	3,321	536	7,547	8,053	8,213	4,956
Net Investment Income (Loss)	14,981	4,555	177	(392)	58,517	13,679	(1,716)
REALIZED AND UNREALIZED GAIN (LOSS)							
Net realized gain (loss) on: Investments in unaffiliated securities	32,220	17,335	(7,223)	112,843	(1,822)	326	41,326
Investments in analmated securities	JZ,ZZU —	- 17,333	(7,223)	112,043	(1,022)	J20 —	41,320
Written options	_	_	_	_	_	_	(88)
Swap agreements	569	_	_	_	_	201	_
Forward foreign currency contracts		_	_	_	55	225	- (0)
Foreign currency exchange transactions  Net change in unrealized appreciation (depreciation) on:	(180)	_	_	_	*	(107)	(3)
Investments in unaffiliated securities	104,123	43,391	8,632	118,696	36,468	105,851	114,679
Investments in affiliated securities	_	_	· —	· —	(47)	_	_
Swap agreements	_	_	_	_	_	(46)	_
Forward foreign currency contracts	_ 22	_	_	_	(14) —*	(485)	*
Foreign currency exchange transactions	33		1 400	224 520		30 10E 00E	
Net Realized and Unrealized Gain	136,765	60,726	1,409	231,539	34,641	105,995	155,914
Net Increase in Net Assets Resulting from Operations	\$ 151,746	\$65,281	\$ 1,586	\$ 231,147	\$93,758	\$ 119,674	\$154,198

<sup>\*</sup>Not shown due to rounding.

(1)Consolidated Statement of Operations (See Note 5 in Notes to Financial Statements).

FOR THE YEAR ENDED DECEMBER 31, 2019

(In thousands)	Natural Resources	Science and Technology	Small Cap Core	Small Cap Growth
INVESTMENT INCOME Dividends from unaffiliated securities Foreign dividend withholding tax Interest and amortization from unaffiliated securities	\$ 2,767 (55) 56	\$ 2,914 (73) 362	\$ 1,975 (1) 191	\$ 711 — 394
Securities lending income — net  Total Investment Income	2,776	318 <b>3,521</b>	27	1,165
	2,770	3,321	2,132	1,103
EXPENSES Investment management fee Distribution and service fees:	756	4,441	1,649	3,301
Class II Shareholder servicing:	223	1,305	485	830
Class I	N/A	_*	N/A	_*
Class II	7	18	7	14
Custodian fees	5	8	16	6
Independent Trustees and Chief Compliance Officer fees Accounting services fee	7 43	32 141	13 70	29 124
Professional fees	33	35	29	31
Other	26	48	12	49
Total Expenses	1,100	6,028	2,281	4,384
Less: Expenses in excess of limit				(92)
Total Net Expenses	1,100	6,028	2,281	4,292
·		•		<u> </u>
Net Investment Income (Loss)	1,676	(2,507)	(89)	(3,127)
REALIZED AND UNREALIZED GAIN (LOSS)  Net realized gain (loss) on:				
Investments in unaffiliated securities	(9,898)	77,233	9,077	22,223
Written options	_	(2,276)	_	_
Swap agreements	_	_	(1)	1,265
Forward foreign currency contracts	1,442		_	_
Foreign currency exchange transactions	10	(24)	_	_
Net change in unrealized appreciation (depreciation) on: Investments in unaffiliated securities	16,492	130,323	32,388	58,289
Swap agreements Forward foreign currency contracts	(1,327)	_	_	1,921
Forward foreign currency contracts  Foreign currency exchange transactions	(1,327) —*	_*	_	_
Net Realized and Unrealized Gain	6,719	205,256	41,464	83,698
	·			
Net Increase in Net Assets Resulting from Operations	\$ 8,395	\$202,749	\$ 41,375	\$ 80,571

<sup>\*</sup> Not shown due to rounding.

	Asset St	trategy <sup>(1)</sup>	Bala	nced	Energy		
(In thousands)	Year ended 12-31-19	Year ended 12-31-18	Year ended 12-31-19	Year ended 12-31-18	Year ended 12-31-19	Year ended 12-31-18	
INCREASE (DECREASE) IN NET ASSETS Operations:							
Net investment income (loss) Net realized gain (loss) on investments Net change in unrealized appreciation (depreciation)	\$ 14,981 32,609 104,156	\$ 14,508 83,992 (139,114)	\$ 4,555 17,335 43,391	\$ 5,385 26,007 (40,922)	\$ 177 (7,223) 8,632	\$ (601) 6,108 (28,418)	
Net Increase (Decrease) in Net Assets Resulting from Operations	151,746	(40,614)	65,281	(9,530)	1,586	(22,911)	
Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains)							
Class I Class II	(20) (45,846)	(18) (49,202)	N/A (31,681)	N/A (10,863)	_ _	_ _	
Total Distributions to Shareholders	(45,866)	(49,220)	(31,681)	(10,863)	_	_	
Capital Share Transactions	(86,614)	(92,730)	(3,079)	(31,749)	873	(106,411)	
Net Increase (Decrease) in Net Assets Net Assets, Beginning of Period	19,266 753,342	(182,564) 935,906	30,521 310,318	(52,142) 362,460	2,459 39,198	(129,322) 168,520	
Net Assets, End of Period	\$772,608	\$753,342	\$340,839	\$ 310,318	\$ 41,657	\$ 39,198	
	Gro	wth	High I	ncome	Internationa	l Core Equity	
(In thousands)					Internationa Year ended 12-31-19		
(In thousands) INCREASE (DECREASE) IN NET ASSETS Operations:	Year ended	Year ended	Year ended	Year ended	Year ended	Year ended	
INCREASE (DECREASE) IN NET ASSETS	Year ended	Year ended	Year ended	Year ended	Year ended	Year ended	
INCREASE (DECREASE) IN NET ASSETS Operations: Net investment income (loss) Net realized gain (loss) on investments	Year ended 12-31-19 \$ (392) 112,843	Year ended 12-31-18 \$ (200) 187,073	Year ended 12-31-19 \$ 58,517 (1,766)	Year ended 12-31-18 \$ 57,825 (24,107)	Year ended 12-31-19 \$ 13,679 645	Year ended 12-31-18 \$ 13,342 58,736	
INCREASE (DECREASE) IN NET ASSETS Operations: Net investment income (loss) Net realized gain (loss) on investments Net change in unrealized appreciation (depreciation) Net Increase (Decrease) in Net Assets Resulting from Operations  Distributions to Shareholders From: Accumulated earnings:	Year ended 12-31-19 \$ (392) 112,843 118,696	Year ended 12-31-18 \$ (200) 187,073 (147,341)	Year ended 12-31-19 \$ 58,517 (1,766) 36,407	Year ended 12-31-18 \$ 57,825 (24,107) (51,073)	Year ended 12-31-19 \$ 13,679 645 105,350	Year ended 12-31-18 \$ 13,342 58,736 (216,635)	
INCREASE (DECREASE) IN NET ASSETS Operations: Net investment income (loss) Net realized gain (loss) on investments Net change in unrealized appreciation (depreciation) Net Increase (Decrease) in Net Assets Resulting from Operations Distributions to Shareholders From:	Year ended 12-31-19 \$ (392) 112,843 118,696	Year ended 12-31-18 \$ (200) 187,073 (147,341)	Year ended 12-31-19 \$ 58,517 (1,766) 36,407	Year ended 12-31-18 \$ 57,825 (24,107) (51,073)	Year ended 12-31-19 \$ 13,679 645 105,350	Year ended 12-31-18 \$ 13,342 58,736 (216,635)	
INCREASE (DECREASE) IN NET ASSETS Operations: Net investment income (loss) Net realized gain (loss) on investments Net change in unrealized appreciation (depreciation) Net Increase (Decrease) in Net Assets Resulting from Operations  Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I	Year ended 12-31-19  \$ (392)	Year ended 12-31-18 \$ (200) 187,073 (147,341) 39,532	Year ended 12-31-19 \$ 58,517 (1,766) 36,407 93,158	Year ended 12-31-18 \$ 57,825 (24,107) (51,073) (17,355)	Year ended 12-31-19 \$ 13,679 645 105,350 119,674	Year ended 12-31-18 \$ 13,342 58,736 (216,635) (144,557)	
INCREASE (DECREASE) IN NET ASSETS Operations: Net investment income (loss) Net realized gain (loss) on investments Net change in unrealized appreciation (depreciation) Net Increase (Decrease) in Net Assets Resulting from Operations  Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I Class II	\$ (392) 112,843 118,696 231,147	Year ended 12-31-18 \$ (200) 187,073 (147,341) 39,532 N/A (99,828)	Year ended 12-31-19 \$ 58,517 (1,766) 36,407 93,158 (3,156) (55,287)	Year ended 12-31-18 \$ 57,825 (24,107) (51,073) (17,355) (3,506) (56,012)	Year ended 12-31-19 \$ 13,679 645 105,350 119,674 N/A (70,370)	Year ended 12-31-18 \$ 13,342 58,736 (216,635) (144,557)	
INCREASE (DECREASE) IN NET ASSETS Operations: Net investment income (loss) Net realized gain (loss) on investments Net change in unrealized appreciation (depreciation)  Net Increase (Decrease) in Net Assets Resulting from Operations  Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I Class II Total Distributions to Shareholders	Year ended 12-31-19  \$ (392)	Year ended 12-31-18 \$ (200) 187,073 (147,341) 39,532 N/A (99,828) (99,828)	\$ 58,517 (1,766) 36,407 93,158 (3,156) (55,287) (58,443)	Year ended 12-31-18 \$ 57,825 (24,107) (51,073) (17,355) (3,506) (56,012) (59,518)	Year ended 12-31-19 \$ 13,679 645 105,350 119,674 N/A (70,370) (70,370)	Year ended 12-31-18 \$ 13,342 58,736 (216,635) (144,557) N/A (32,980) (32,980)	

(1) Consolidated Statements of Changes in Net Assets (See Note 5 in Notes to Financial Statements).

	· · · · · · · ·	Growth		esources	Science and Technology		
(In thousands)	Year ended 12-31-19	Year ended 12-31-18	Year ended 12-31-19	Year ended 12-31-18	Year ended 12-31-19	Year ended 12-31-18	
INCREASE (DECREASE) IN NET ASSETS							
Operations:	¢ (4.74C)	t (2.204)	ф 4.C7C	¢ 007	¢ (2.507)	¢ (2.425)	
Net investment income (loss) Net realized gain (loss) on investments	\$ (1,716) 41,235	\$ (2,364) 158,437	\$ 1,676 (8,446)	\$ 837 2,092	\$ (2,507) 74,933	\$ (2,425) 136,933	
Net change in unrealized appreciation (depreciation)	114,679	(136,340)	15,165	(30,405)	130,323	(144,970)	
Net Increase (Decrease) in Net Assets Resulting from							
Operations	154,198	19,733	8,395	(27,476)	202,749	(10,462)	
Distributions to Shareholders From:							
Accumulated earnings:							
(combined net investment income and net realized gains) Class I	(35,378)	(6,483)	N/A	N/A	(80)	(85)	
Class II	(46,820)	(23,180)	(870)	(351)	(49,737)	(65,600)	
Total Distributions to Shareholders	(82,198)	(29,663)	(870)	(351)	(49,817)	(65,685)	
Capital Share Transactions	61,552	(291,936)	(8,357)	(15,129)	(2,175)	(138,951)	
Net Increase (Decrease) in Net Assets Net Assets, Beginning of Period	133,552 414,014	(301,866) 715,880	(832) 88,440	(42,956) 131,396	150,757 429,666	(215,098) 644,764	
Net Assets, End of Period	\$547,566	\$ 414,014	\$ 87,608	\$ 88,440	\$580,423	\$429,666	
Net Assets, Life of Feriod	Ψ3-17,300	Ψ ΤΙΤ,ΟΙΤ	Ψ 07,000	Ψ 00,440	Ψ300,π23	Ψ423,000	
	Small Cap Core		Small Cap Growth				
(In thousands)	Year ended 12-31-19	Year ended 12-31-18	Year ended 12-31-19	Year ended 12-31-18			
INCREASE (DECREASE) IN NET ASSETS							
Operations:							
Net investment income (loss)	\$ (89)	\$ (857)	\$ (3,127)	\$ (1,836)			
Net realized gain on investments  Net change in unrealized appreciation (depreciation)	9,076 32,388	37,591 (48,670)	23,488 60,210	67,357 (77,892)			
Net Increase (Decrease) in Net Assets Resulting from	32,300	(10,070)	00,210	(11,032)			
Operations	41,375	(11,936)	80,571	(12,371)			
Distributions to Shareholders From:	41,375	(11,936)	80,571	(12,371)			
Distributions to Shareholders From: Accumulated earnings:	41,375	(11,936)	80,571	(12,371)			
Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains)				(12,371)			
Distributions to Shareholders From: Accumulated earnings:	41,375 N/A (36,690)	N/A	(4,305)	_			
Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I	N/A			(12,371) ————————————————————————————————————			
Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I Class II	N/A (36,690)	N/A (56,235)	(4,305) (24,945)	(117,993)			
Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I Class II Total Distributions to Shareholders	N/A (36,690) (36,690)	N/A (56,235) (56,235)	(4,305) (24,945) (29,250)	(117,993) (117,993)			
Distributions to Shareholders From: Accumulated earnings: (combined net investment income and net realized gains) Class I Class II Total Distributions to Shareholders Capital Share Transactions	N/A (36,690) (36,690) 7,974	N/A (56,235) (56,235) (72,013)	(4,305) (24,945) (29,250) (14,405)	(117,993) (117,993) 105,572			

FOR A SHARE OF CAPITAL STOCK OUTSTANDING THROUGHOUT EACH PERIOD

	Net Asset Value, Beginning of Period	Net Investment Income (Loss) <sup>(1)</sup>	Net Realized and Unrealized Gain (Loss) on Investments	Total from Investment Operations	Distributions From Net Investment Income	Distributions From Net Realized Gains	Total Distributions
Asset Strategy Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	\$ 8.29 9.37 8.57	\$ 0.20 0.18 0.08	\$ 1.63 (0.67) 0.88	\$ 1.83 (0.49) 0.96	\$(0.23) (0.20) (0.16)	\$(0.39) (0.39) —	\$(0.62) (0.59) (0.16)
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	8.29 9.37 8.04 8.30 10.87	0.18 0.16 0.03 0.06 0.08	1.62 (0.67) 1.44 (0.27) (0.77)	1.80 (0.51) 1.47 (0.21) (0.69)	(0.20) (0.18) (0.14) (0.05) (0.04)	(0.39) (0.39) — — (1.84)	(0.59) (0.57) (0.14) (0.05) (1.88)
Balanced Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	7.46 7.95 7.47 8.76 10.19	0.11 0.12 0.12 0.11 0.12	1.44 (0.36) 0.70 0.00* (0.09)	1.55 (0.24) 0.82 0.11 0.03	(0.14) (0.13) (0.12) (0.12) (0.09)	(0.65) (0.12) (0.22) (1.28) (1.37)	(0.79) (0.25) (0.34) (1.40) (1.46)
Energy Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	3.88 5.87 5.84	0.03 0.00* 0.06	0.11 (1.99) 0.02	0.14 (1.99) 0.08	<u> </u>	_ _ _	 (0.05)
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	3.87 5.87 6.77 5.04 6.51	0.02 (0.02) 0.04 (0.02) 0.00*	0.11 (1.98) (0.90) 1.76 (1.44)	0.13 (2.00) (0.86) 1.74 (1.44)	(0.04) (0.01) *		(0.04) (0.01) (0.03)
Growth Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	11.02 12.09 10.30 11.42 12.08	(0.01) 0.00° 0.01 0.03 0.00*	3.58 0.36 2.84 0.03 0.85	3.57 0.36 2.85 0.06 0.85	(0.03) _* (0.01)	(3.26) (1.43) (1.03) (1.18) (1.50)	(3.26) (1.43) (1.06) (1.18) (1.51)
High Income Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	3.35 3.65 3.73	0.24 0.23 0.16	0.13 (0.29) (0.03)	0.37 (0.06) 0.13	(0.24) (0.24) (0.21)	_ _ _	(0.24) (0.24) (0.21)
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	3.34 3.64 3.61 3.35 3.85	0.23 0.22 0.23 0.24 0.26	0.13 (0.29) 0.01 0.28 (0.48)	0.36 (0.07) 0.24 0.52 (0.22)	(0.23) (0.23) (0.21) (0.26) (0.24)		(0.23) (0.23) (0.21) (0.26) (0.28)
International Core Equity Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	14.66 18.58 15.30 15.53 18.00	0.29 0.30 0.23 0.24 0.20	2.28 (3.45) 3.29 (0.11) (0.06)	2.57 (3.15) 3.52 0.13 0.14	(0.25) (0.28) (0.24) (0.20) (0.24)	(1.33) (0.49) — (0.16) (2.37)	(1.58) (0.77) (0.24) (0.36) (2.61)

<sup>\*</sup>Not shown due to rounding.

<sup>(1)</sup>Based on average weekly shares outstanding.

<sup>(2)</sup>Based on net asset value. Total returns do not reflect a sales charge or contingent deferred sales charge, if applicable. Total returns for periods less than one year are not annualized.

<sup>(3)</sup>Ratios excluding expense waivers are included only for periods in which the class had waived or reimbursed expenses.

<sup>(4)</sup> For the period from April 28, 2017 (commencement of operations of the class) through December 31, 2017.

<sup>(5)</sup>Annualized

<sup>(6)</sup>Portfolio turnover is calculated at the fund level. Percentage indicated was calculated for the period ended December 31, 2017.

	Net Asset Value, End of Period	Total Return <sup>(2)</sup>	Net Assets, End of Period (in millions)	Ratio of Expenses to Average Net Assets Including Expense Waiver	Ratio of Net Investment Income (Loss) to Average Net Assets Including Expense Waiver	Ratio of Expenses to Average Net Assets Excluding Expense Waiver <sup>(3)</sup>	Ratio of Net Investment Income (Loss) to Average Net Assets Excluding Expense Waiver <sup>(3)</sup>	Portfolio Turnover Rate
Asset Strategy Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	\$ 9.50 8.29 9.37	22.08% -5.20 11.16	\$ 1 _* _*	0.77% 0.78 0.74 <sup>(5)</sup>	2.19% 1.91 1.30 <sup>(5)</sup>	0.77% 0.78 —	2.19% 1.91 —	46% 58 39 <sup>(6)</sup>
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	9.50 8.29 9.37 8.04 8.30	21.78 -5.44 18.27 -2.57 -8.35	772 753 936 954 1,268	1.02 1.03 1.02 1.01 0.98	1.94 1.65 0.35 0.70 0.81	 1.02 0.99	  0.69 0.80	46 58 39 68 70
Balanced Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	8.22 7.46 7.95 7.47 8.76	22.09 -3.24 11.37 2.03 -0.32	341 310 362 361 383	1.01 1.01 1.01 1.01 1.00	1.38 1.55 1.54 1.53 1.28	- - - -	_ _ _ _	44 54 48 54 44
Energy Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	4.02 3.88 5.87	3.74 -33.96 1.55	_* _* _*	1.04 0.94 0.92 <sup>(5)</sup>	0.64 -0.09 1.70 <sup>(5)</sup>	0.94	-0.09 —	21 37 22 <sup>(6)</sup>
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	4.00 3.87 5.87 6.77 5.04	3.48 -34.14 -12.64 34.55 -22.14	42 39 169 196 117	1.29 1.19 1.19 1.19 1.20	0.42 -0.41 0.75 -0.27 0.08	_ _ _ _	_ _ _ _	21 37 22 31 34
Growth Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	11.33 11.02 12.09 10.30 11.42	36.59 2.28 29.34 1.22 7.17	791 669 883 835 897	1.00 1.00 0.99 0.98 0.96	-0.05 -0.02 0.05 0.26 0.03	  1.00 0.99	  0.24 	30 37 41 53 30
High Income Class I Shares Year ended 12-31-2019 Year ended 12-31-2017 <sup>(4)</sup>	3.48 3.35 3.65	11.49 -1.86 3.42	27 44 56	0.67 0.66 0.66 <sup>(5)</sup>	6.82 6.50 6.53 <sup>(5)</sup>	0.66	6.50	35 42 52 <sup>(6)</sup>
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2016 Year ended 12-31-2016 Year ended 12-31-2015	3.47 3.34 3.64 3.61 3.35	11.19 -2.11 6.68 16.19 -6.50	859 803 887 845 725	0.92 0.91 0.91 0.89 0.89	6.57 6.27 6.22 6.97 7.01		  6.94 6.98	35 42 52 36 44
International Core Equity Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	15.65 14.66 18.58 15.30 15.53	18.69 -17.81 23.16 1.08 -0.94	699 676 835 736 675	1.16 1.16 1.16 1.17 1.16	1.93 1.70 1.33 1.60 1.18	_ _ _ _	  	69 51 59 77 87

FOR A SHARE OF CAPITAL STOCK OUTSTANDING THROUGHOUT EACH PERIOD

	Net Asset Value, Beginning of Period	Net Investment Income (Loss) <sup>(1)</sup>	Net Realized and Unrealized Gain (Loss) on Investments	Total from Investment Operations	Distributions From Net Investment Income	Distributions From Net Realized Gains	Total Distributions
Mid Cap Growth Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	\$ 11.10 11.63 10.30	\$(0.02) (0.02) 0.00*	\$ 3.95 0.09 1.64	\$ 3.93 0.07 1.64	\$ <u>-</u> -	\$(2.26) (0.60) (0.31)	\$(2.26) (0.60) (0.31)
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	11.07 11.61 9.44 9.42 10.84	(0.06) (0.05) (0.04) (0.01) (0.01)	3.94 0.09 2.52 0.55 (0.52)	3.88 0.04 2.48 0.54 (0.53)	_ _ _ _	(2.26) (0.58) (0.31) (0.52) (0.89)	(2.26) (0.58) (0.31) (0.52) (0.89)
Natural Resources Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2016 Year ended 12-31-2015	3.55 4.63 4.50 3.66 4.72	0.07 0.03 0.00* 0.01 0.02	0.26 (1.10) 0.14 0.86 (1.08)	0.33 (1.07) 0.14 0.87 (1.06)	(0.04) (0.01) (0.01) (0.03)	_ _ _ _ _	(0.04) (0.01) (0.01) (0.03)
Science and Technology Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	21.91 27.04 25.22	(0.06) (0.03) (0.04)	10.95 (1.24) 4.16	10.89 (1.27) 4.12	_ _ _	(2.86) (3.86) (2.30)	(2.86) (3.86) (2.30)
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	21.84 27.04 22.34 22.96 25.02	(0.13) (0.11) (0.13) (0.11) (0.15)	10.90 (1.23) 7.08 0.34 (0.41)	10.77 (1.34) 6.95 0.23 (0.56)	_ _ _ _	(2.79) (3.86) (2.25) (0.85) (1.50)	(2.79) (3.86) (2.25) (0.85) (1.50)
Small Cap Core Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2016 Year ended 12-31-2016 Year ended 12-31-2015	13.51 18.32 18.34 15.66 17.98	0.00* (0.06) 0.00* 0.01 0.05	3.12 (1.37) 2.21 4.17 (0.95)	3.12 (1.43) 2.21 4.18 (0.90)	(0.02) (0.07) (0.02)	(2.92) (3.36) (2.23) (1.43) (1.40)	(2.92) (3.38) (2.23) (1.50) (1.42)
Small Cap Growth Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 <sup>(5)</sup>	7.69 8.76	(0.05) 0.00*	1.85 (1.07)	1.80 (1.07)	— —	(0.69)	(0.69)
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015 * Not shown due to rounding	7.68 11.63 9.69 10.60 12.15	(0.07) (0.06) (0.07) (0.07) (0.09)	1.85 0.03 2.27 0.23 0.51	1.78 (0.03) 2.20 0.16 0.42	(0.05)	(0.69) (3.87) (0.26) (1.07) (1.97)	(0.69) (3.92) (0.26) (1.07) (1.97)

<sup>\*</sup> Not shown due to rounding.

<sup>(1)</sup>Based on average weekly shares outstanding.

<sup>(2)</sup> Based on net asset value. Total returns do not reflect a sales charge or contingent deferred sales charge, if applicable. Total returns for periods less than one year are not annualized.

<sup>(3)</sup> Ratios excluding expense waivers are included only for periods in which the class had waived or reimbursed expenses.

<sup>(4)</sup> For the period from April 28, 2017 (commencement of operations of the class) through December 31, 2017.

<sup>(5)</sup> For the period from November 5, 2018 (commencement of operations of the class) through December 31, 2018.

<sup>(6)</sup> Annualized.

<sup>(7)</sup> Portfolio turnover is calculated at the fund level. Percentage indicated was calculated for the period ended December 31, 2017.

<sup>(8)</sup> Portfolio turnover is calculated at the fund level. Percentage indicated was calculated for the period ended December 31, 2018.

<sup>(9)</sup> Expense ratio based on the period excluding reorganization expenses was 0.89%.

<sup>(10)</sup> Expense ratio based on the period excluding reorganization expenses was 1.14%.

	Net Asset Value, End of Period	Total Return <sup>(2)</sup>	Net Assets, End of Period (in millions)	Ratio of Expenses to Average Net Assets Including Expense Waiver	Ratio of Net Investment Income (Loss) to Average Net Assets Including Expense Waiver	Ratio of Expenses to Average Net Assets Excluding Expense Waiver <sup>(3)</sup>	Ratio of Net Investment Income (Loss) to Average Net Assets Excluding Expense Waiver <sup>(3)</sup>	Portfolio Turnover Rate
Mid Cap Growth Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 <sup>(4)</sup>	\$ 12.77 11.10 11.63	38.28% 0.20 16.44	\$233 184 131	0.85% 0.85 0.85 <sup>(6)</sup>	-0.20% -0.14 0.05 <sup>(6)</sup>	0.90% 0.90 0.89 <sup>(6)</sup>	-0.25% -0.19 0.01 <sup>(6)</sup>	20% 53 25 <sup>(7)</sup>
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	12.69 11.07 11.61 9.44 9.42	37.94 -0.06 26.89 6.12 -5.78	315 230 585 615 586	1.10 1.10 1.11 1.10 1.10	-0.45 -0.42 -0.39 -0.09 -0.07	1.15 1.15 1.15 1.15 1.15	-0.50 -0.47 -0.43 -0.14 -0.12	20 53 25 33 42
Natural Resources Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2016 Year ended 12-31-2016 Year ended 12-31-2015	3.84 3.55 4.63 4.50 3.66	9.46 -23.23 2.97 23.81 -22.39	88 88 131 144 114	1.24 1.21 1.36 1.36 1.35	1.88 0.72 0.11 0.20 0.54	_ _ _ _ _	_ _ _ _	36 33 44 67 34
Science and Technology Class I Shares Year ended 12-31-2019 Year ended 12-31-2017 <sup>(4)</sup>	29.94 21.91 27.04	49.86 -5.00 17.24	1 1 _*	0.90 0.91 0.90 <sup>(6)</sup>	-0.23 -0.11 -0.25 <sup>(6)</sup>	0.91	-0.11	31 17 27 <sup>(7)</sup>
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	29.82 21.84 27.04 22.34 22.96	49.48 -5.23 32.12 1.54 -2.88	579 429 645 514 582	1.15 1.16 1.15 1.15 1.13	-0.48 -0.38 -0.51 -0.52 -0.60	  1.17 1.15	-0.54 -0.62	31 17 27 16 25
Small Cap Core Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2016 Year ended 12-31-2016	13.71 13.51 18.32 18.34 15.66	24.33 -10.49 13.73 28.88 -5.58	188 175 316 348 318	1.18 1.17 1.15 1.16 1.15	-0.05 -0.34 0.01 0.08 0.26	_ _ _ _ _	_ _ _ _	126 112 112 182 142
Small Cap Growth Class I Shares Year ended 12-31-2019 Year ended 12-31-2018 <sup>(5)</sup>	8.80 7.69	23.68 -12.24	58 52	0.89 1.05 <sup>(6)(9)</sup>	-0.60 0.15 <sup>(6)</sup>	0.91 1.07 <sup>(6)</sup>	-0.62 0.13 <sup>(6)</sup>	41 52 <sup>(8)</sup>
Class II Shares Year ended 12-31-2019 Year ended 12-31-2018 Year ended 12-31-2017 Year ended 12-31-2016 Year ended 12-31-2015	8.77 7.68 11.63 9.69 10.60	23.37 -4.11 23.12 2.92 1.88	331 300 377 426 430	1.14 1.16 <sup>(10)</sup> 1.15 1.14 1.13	-0.84 -0.52 -0.69 -0.79 -0.76	1.17 1.18 1.17 1.16 1.15	-0.87 -0.54 -0.71 -0.81 -0.78	41 52 55 107 102

#### 1. ORGANIZATION

Ivy Variable Insurance Portfolios, a Delaware statutory trust (the "Trust"), is registered under the Investment Company Act of 1940, as amended (the "1940 Act"), as an open-end management investment company. Asset Strategy, Balanced, Energy, Growth, High Income, International Core Equity, Mid Cap Growth, Natural Resources, Science and Technology, Small Cap Core and Small Cap Growth (each, a "Portfolio") are eleven series of the Trust and are the only series of the Trust included in these financial statements. The assets belonging to each Portfolio are held separately by the custodian. The investment objective, policies and risk factors of each Portfolio are described more fully in the Prospectus and Statement of Additional Information ("SAI"). Each Portfolio's investment adviser is Ivy Investment Management Company ("IICO").

Each Portfolio offers Class II shares. Asset Strategy, Energy, High Income, Mid Cap Growth, Science and Technology and Small Cap Growth also offer Class I shares. All classes of shares have identical rights and voting privileges with respect to the Portfolio in general and exclusive voting rights on matters that affect that class alone. Net investment income, net assets and net asset value per share ("NAV") may differ due to each class having its own expenses, such as transfer agent and shareholder servicing fees, directly attributable to that class. Class II shares have a distribution and service plan. Class I shares are not included in the plan.

#### 2. SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of significant accounting policies consistently followed by each Portfolio.

**Security Transactions and Related Investment Income.** Security transactions are accounted for on the trade date (date the order to buy or sell is executed). Realized gains and losses are calculated on the identified cost basis. Interest income is recorded on the accrual basis and includes paydown gain (loss) and accretion of discounts and amortization of premiums. Dividend income is recorded on the ex-dividend date, except certain dividends from foreign securities where the exdividend date may have passed, which are recorded as soon as the Portfolio is informed of the ex-dividend date. All or a portion of the distributions received from a real estate investment trust or publicly traded partnership may be designated as a reduction of cost of the related investment or realized gain.

**Foreign Currency Translation.** Each Portfolio's accounting records are maintained in U.S. dollars. All assets and liabilities denominated in foreign currencies are translated into U.S. dollars daily, using foreign exchange rates obtained from an independent pricing service approved by the Board of Trustees of the Trust (the "Board"). Purchases and sales of investment securities and accruals of income and expenses are translated at the rate of exchange prevailing on the date of the transaction. For assets and liabilities other than investments in securities, net realized and unrealized gains and losses from foreign currency translation arise from changes in currency exchange rates. Each Portfolio combines fluctuations from currency exchange rates and fluctuations in value when computing net realized gain (loss) and net change in unrealized appreciation (depreciation) on investments. Foreign exchange rates are typically valued as of the close of the New York Stock Exchange ("NYSE"), normally 4:00 P.M. Eastern time, on each day the NYSE is open for trading.

**Allocation of Income, Expenses, Gains and Losses.** Income, expenses (other than those attributable to a specific class), gains and losses are allocated on a daily basis to each class of shares based upon the relative proportion of net assets represented by such class. Operating expenses directly attributable to a specific class are charged against the operations of that class.

**Dividends and Distributions to Shareholders.** Dividends and distributions to shareholders are recorded by each Portfolio on the business day following record date. Net investment income dividends and capital gains distributions are determined in accordance with income tax regulations which may differ from accounting principles generally accepted in the United States of America ("U.S. GAAP"). If the total dividends and distributions made in any tax year exceeds net investment income and accumulated realized capital gains, a portion of the total distribution may be treated as a tax return of capital.

**Income Taxes.** It is the policy of each Portfolio to distribute all of its taxable income and capital gains to its shareholders and to otherwise qualify as a regulated investment company under Subchapter M of the Internal Revenue Code. In addition, each Portfolio intends to pay distributions as required to avoid imposition of excise tax. Accordingly, no provision has been made for Federal income taxes. The Portfolios file income tax returns in U.S. federal and applicable state jurisdictions. The Portfolios' tax returns are subject to examination by the relevant taxing authority until expiration of the applicable statute of limitations, which is generally three years after the filing of the tax returns. Management of the Trust periodically reviews all tax positions to assess whether it is more likely than not that the position would be sustained upon examination by the relevant tax authority based on the technical merits of each position. As of the date of these financial statements, management believes that no liability for unrecognized tax positions is required.

**Segregation and Collateralization.** In cases in which the 1940 Act and the interpretive positions of the Securities and Exchange Commission ("SEC"), the Dodd Frank Wall Street Reform and Consumer Protection Act, or the interpretive rules

and regulations of the U.S. Commodities Futures Trading Commission require that a Portfolio either deliver collateral or segregate assets in connection with certain investments (e.g., dollar rolls, financial futures contracts, foreign currency exchange contracts, options written, securities with extended settlement periods, and swaps), the Portfolio will segregate collateral or designate on its books and records, cash or other liquid securities having a value at least equal to the amount that is required to be physically segregated for the benefit of the counterparty. Furthermore, based on requirements and agreements with certain exchanges and third party broker-dealers, each party has requirements to deliver/deposit cash or securities as collateral for certain investments. Certain countries require that cash reserves be held while investing in companies incorporated in that country. These cash reserves and cash collateral that has been pledged to cover obligations of the Portfolios under derivative contracts, if any, will be reported separately on the Statement of Assets and Liabilities as "Restricted cash". Securities collateral pledged for the same purpose, if any, is noted on the Schedule of Investments.

Concentration of Market and Credit Risk. In the normal course of business, the Portfolios invest in securities and enter into transactions where risks exist due to fluctuations in the market (market risk) or failure of the issuer of a security to meet all its obligations (issuer credit risk). The value of securities held by the Portfolios may decline in response to certain events, including those directly involving the issuers whose securities are owned by the Portfolios; conditions affecting the general economy; overall market changes; local, regional or global political, social or economic instability; and currency and interest rate and price fluctuations. Similar to issuer credit risk, the Portfolios may be exposed to counterparty credit risk, or the risk that an entity with which the Portfolios have unsettled or open transactions may fail to or be unable to perform on its commitments. The Portfolios manage counterparty credit risk by entering into transactions only with counterparties that they believe have the financial resources to honor their obligations and by monitoring the financial stability of those counterparties. Financial assets, which potentially expose the Portfolios to market, issuer and counterparty credit risks, consist principally of financial instruments and receivables due from counterparties. The extent of the Portfolios' exposure to market, issuer and counterparty credit risks with respect to these financial assets is generally approximated by their value recorded on the Portfolios' Statement of Assets and Liabilities, less any collateral held by the Portfolios.

Certain Portfolios may hold high-yield or non-investment-grade bonds, that may be subject to a greater degree of credit risk. Credit risk relates to the ability of the issuer to meet interest or principal payments or both as they become due. The Portfolios may acquire securities in default and are not obligated to dispose of securities whose issuers subsequently default.

Certain Portfolios may enter into financial instrument transactions (such as swaps, futures, options and other derivatives) that may have off-balance sheet market risk. Off-balance sheet market risk exists when the maximum potential loss on a particular financial instrument is greater than the value of such financial instrument, as reflected on the Statement of Assets and Liabilities.

If a Portfolio invests directly in foreign currencies or in securities that trade in, and receive revenues in, foreign currencies, or in financial derivatives that provide exposure to foreign currencies, it will be subject to the risk that those currencies will decline in value relative to the base currency of the Portfolio, or, in the case of hedging positions, that the Portfolio's base currency will decline in value relative to the currency being hedged. Currency rates in foreign countries may fluctuate significantly over short periods of time for a number of reasons, including changes in interest rates, intervention (or the failure to intervene) by U.S. or foreign governments, central banks or supranational entities such as the International Monetary Fund, or by the imposition of currency controls or other political developments in the United States or abroad.

The London Interbank Offered Rate "LIBOR" is an indicative measure of the average interest rate at which major global banks could borrow from one another. LIBOR is quoted in multiple currencies and multiple time frames using data reported by private-sector banks. LIBOR is used extensively in the United States and globally as a "benchmark" or "reference rate" for various commercial and financial contracts, including corporate and municipal bonds and loans, floating rate mortgages, asset-backed securities, consumer loans, and interest rate swaps and other derivatives.

It is expected that a number of private-sector banks currently reporting information used to set LIBOR will stop doing so after 2021 when their current reporting commitment ends, which could either cause LIBOR to stop publication immediately or cause LIBOR's regulator to determine that its quality has degraded to the degree that it is no longer representative of its underlying market.

Management believes that, with respect to any significant investments by a Portfolio in instruments linked to LIBOR, the impact on investments and discontinuation of LIBOR may represent a significant risk.

However, management acknowledges that the anticipated transition away from LIBOR will occur after 2021 and certain of the current investments will mature prior to that time. Furthermore, the ways in which LIBOR's discontinuation potentially could impact the Portfolios' investments is not fully known. The extent of that impact may vary depending on various factors, which include, but are not limited to: (i) existing fallback or termination provisions in individual contracts and (ii) whether, how, and when industry participants develop and adopt new successor reference rates and/or fallbacks for both legacy and new instruments.

In addition, the transition to a successor rate could potentially cause (i) increased volatility or illiquidity in markets for instruments that currently rely on LIBOR, (ii) a reduction in the value of certain instruments held by a Portfolio, or (iii) reduced effectiveness of related Portfolio transactions, such as hedging.

As the impacts of the transition become clearer during the next year, Management will be evaluating the impacts of these changes.

**Inflation-Indexed Bonds.** Certain Portfolios may invest in inflation-indexed bonds. Inflation-indexed bonds are fixed-income securities whose principal value is periodically adjusted to the rate of inflation. The interest rate on these bonds is generally fixed at issuance at a rate lower than typical bonds. Over the life of an inflation-indexed bond, however, interest will be paid based on a principal value, which is adjusted for inflation. Any increase or decrease in the principal amount of an inflation-indexed bond will be included as interest income on the Statement of Operations, even though investors do not receive their principal until maturity.

**Interest Only Obligations.** These securities entitle the owner to receive only the interest portion from a bond, Treasury note or pool of mortgages. These securities are generally created by a third party separating a bond or pool of mortgages into distinct interest-only and principal-only securities. As the principal (par) amount of a bond or pool of mortgages is paid down, the amount of interest income earned by the owner will decline as well.

**Loans.** Certain Portfolios may invest in loans, the interest rates of which float or adjust periodically based upon a specified adjustment schedule, benchmark indicator, or prevailing interest rates, the debtor of which may be a domestic or foreign corporation, partnership or other entity ("Borrower"). Loans generally pay interest at rates which are periodically redetermined by reference to a base lending rate plus a premium. These base lending rates generally include prime rates of one or more major U.S. banks, the LIBOR or certificates of deposit rates. Loans often require prepayments from excess cash flow or permit the Borrower to repay at its election. The degree to which Borrowers repay cannot be predicted with accuracy. As a result, the actual maturity may be substantially less than the stated maturities. Loans are exempt from registration under the Securities Act of 1933, as amended, may contain certain restrictions on resale, and cannot be sold publicly. A Portfolio's investments in loans may be in the form of participations in loans or assignments of all or a portion of loans from third parties.

When a Portfolio purchases assignments, it acquires all the rights and obligations under the loan agreement of the assigning lender. Assignments may, however, be arranged through private negotiations between potential assignees and potential assignors, and the rights and obligations acquired by the purchaser of an assignment may differ from, and be more limited than those held by the assigning lender. When a Portfolio purchases a participation of a loan interest, the Portfolio typically enters into a contractual agreement with the lender or other third party selling the participation. A participation interest in loans includes the right to receive payments of principal, interest and any fees to which it is entitled from the lender and only upon receipt by the lender of payments from the Borrower, but not from the Borrower directly. When investing in a participation interest, if a Borrower is unable to meet its obligations under a loan agreement, a Portfolio generally has no direct right to enforce compliance with the terms of the loan agreement. As a result, the Portfolio assumes the credit risk of the Borrower, the selling participant, and any other persons that are interpositioned between the Portfolio and the Borrower. If the lead lender in a typical lending syndicate becomes insolvent, enters Federal Deposit Insurance Corporation ("FDIC") receivership or, if not FDIC insured, enters into bankruptcy, the Portfolio may incur certain costs and delays in receiving payment or may suffer a loss of principal and interest.

**Payment In-Kind Securities.** Certain Portfolios may invest in payment in-kind securities ("PIKs"). PIKs give the issuer the option at each interest payment date of making interest payments in cash or in additional debt securities. Those additional debt securities usually have the same terms, including maturity dates and interest rates, and associated risks as the original bonds. The daily market quotations of the original bonds may include the accrued interest (referred to as a dirty price) and require a pro-rata adjustment from the unrealized appreciation or depreciation on investments to interest receivable on the Statement of Assets and Liabilities.

Securities on a When-Issued or Delayed Delivery Basis. Certain Portfolios may purchase securities on a "when-issued" basis, and may purchase or sell securities on a "delayed delivery" basis. "When-issued" or "delayed delivery" refers to securities whose terms and indenture are available and for which a market exists, but which are not available for immediate delivery. Delivery and payment for securities that have been purchased by a Portfolio on a when-issued basis normally take place within six months and possibly as long as two years or more after the trade date. During this period, such securities do not earn interest, are subject to market fluctuation and may increase or decrease in value prior to their delivery. The purchase of securities on a when-issued basis may increase the volatility of a Portfolio's NAV to the extent the Portfolio executes such transactions while remaining substantially fully invested. When a Portfolio engages in when-issued or delayed delivery transactions, it relies on the buyer or seller, as the case may be, to complete the transaction. Their failure to do so may cause the Portfolio to lose the opportunity to obtain or dispose of the security at a price and yield IICO, or the Portfolio's investment subadviser, as applicable, consider advantageous. The Portfolio maintains internally designated assets with a value equal to or greater than the amount of its purchase commitments. The Portfolio may also sell securities that it purchased on a when-issued or delayed delivery basis prior to settlement of the original purchase.

**Custodian Fees.** "Custodian fees" on the Statement of Operations may include interest expense incurred by a Portfolio on any cash overdrafts of its custodian account during the period. Such cash overdrafts may result from the effects of failed trades in portfolio securities and from cash outflows resulting from unanticipated shareholder redemption activity. A Portfolio pays interest to its custodian on such cash overdrafts, to the extent they are not offset by positive cash balances maintained by that Portfolio. The "Earnings credit" line item, if shown, represents earnings on cash balances maintained by that Portfolio during the period. Such interest expense and other custodian fees may be paid with these earnings.

**Indemnification.** The Trust's organizational documents provide current and former Trustees and Officers with a limited indemnification against liabilities arising in connection with the performance of their duties to the Trust. In the normal course of business, the Trust may also enter into contracts that provide general indemnification. The Trust's maximum exposure under these arrangements is unknown and is dependent on future claims that may be made against the Trust. The risk of material loss from such claims is considered remote.

**Basis of Preparation.** Each Portfolio is an investment company and follows accounting and reporting guidance in the Financial Accounting Standards Board ("FASB") Accounting Standards Codification Topic 946 ("ASC 946"). The accompanying financial statements were prepared in accordance with U.S. GAAP, including but not limited to ASC 946. U.S. GAAP requires the use of estimates made by management. Management believes that estimates and valuations are appropriate; however, actual results may differ from those estimates, and the valuations reflected in the accompanying financial statements may differ from the value ultimately realized upon sale or maturity.

Subsequent Events. Management has performed a review for subsequent events through the date this report was issued.

#### 3. INVESTMENT VALUATION AND FAIR VALUE MEASUREMENTS

Each Portfolio's investments are reported at fair value. Fair value is defined as the price that each Portfolio would receive upon selling an asset or would pay upon satisfying a liability in an orderly transaction between market participants at the measurement date. Each Portfolio calculates the NAV of its shares as of the close of the NYSE, normally 4:00 P.M. Eastern time, on each day the NYSE is open for trading.

For purposes of calculating the NAV, the portfolio securities and financial instruments are valued on each business day using pricing and valuation methods as adopted by the Board. Where market quotes are readily available, fair value is generally determined on the basis of the last reported sales price, or if no sales are reported, based on quotes obtained from a quotation reporting system, established market makers, or pricing services.

Prices for fixed-income securities are typically based on quotes that are obtained from an independent pricing service approved by the Board. To determine values of fixed-income securities, the independent pricing service utilizes such factors as current quotations by broker/dealers, coupon, maturity, quality, type of issue, trading characteristics, and other yield and risk factors it deems relevant in determining valuations. Securities that cannot be valued by the independent pricing service may be valued using quotes obtained from dealers that make markets in the securities.

Short-term securities with maturities of 60 days or less are valued based on quotes that are obtained from an independent pricing service approved by the Board as described in the preceding paragraph above.

Because many foreign markets close before the NYSE, events may occur between the close of the foreign market and the close of the NYSE that could have a material impact on the valuation of foreign securities. Waddell & Reed Services Company ("WRSCO"), pursuant to procedures adopted by the Board, evaluates the impact of these events and may adjust the valuation of foreign securities to reflect the fair value as of the close of the NYSE. In addition, all securities for which values are not readily available or are deemed unreliable are appraised at fair value as determined in good faith under the supervision of the Board.

Where market quotes are not readily available, portfolio securities or financial instruments are valued at fair value, as determined in good faith by the Board or Valuation Committee pursuant to procedures approved by the Board.

Market quotes are considered not readily available in circumstances where there is an absence of current or reliable market-based data (e.g., trade information or broker quotes), including where events occur after the close of the relevant market, but prior to the NYSE close, that materially affect the values of a Portfolio's securities or financial instruments. In addition, market quotes are considered not readily available when, due to extraordinary circumstances, the exchanges or markets on which the securities trade do not open for trading for the entire day and no other market prices are available.

The Board has delegated to WRSCO the responsibility for monitoring significant events that may materially affect the values of a Portfolio's securities or financial instruments and for determining whether the value of the applicable securities or financial instruments should be re-evaluated in light of such significant events. IICO, pursuant to authority delegated by the Board, has established a Valuation Committee to administer and oversee the valuation process, including the use of third party pricing vendors.

The Board has adopted methods for valuing securities and financial instruments in circumstances where market quotes are not readily available. For instances in which daily market quotes are not readily available, investments may be valued,

pursuant to procedures established by the Board, with reference to other securities or indices. In the event that the security or financial instrument cannot be valued pursuant to one of the valuation methods established by the Board, the value of the security or financial instrument will be determined in good faith by the Valuation Committee in accordance with the procedures adopted by the Board.

When a Portfolio uses these fair valuation methods applied by WRSCO that use significant unobservable inputs to determine its NAV, securities will be priced by a method that the Board or persons acting at its direction believe accurately reflects fair value and are categorized as Level 3 of the fair value hierarchy. These methods may require subjective determinations about the value of a security. The prices used by a Portfolio may differ from the value that will ultimately be realized at the time the securities are sold.

WRSCO is responsible for monitoring the implementation of the pricing and valuation policies through a series of activities to provide reasonable comfort of the accuracy of prices including: 1) periodic vendor due diligence meetings to review methodologies, new developments, and process at vendors, 2) daily and monthly multi-source pricing comparisons reviewed and submitted to the Valuation Committee, and 3) daily review of unpriced, stale, and variance reports with exceptions reviewed by management and the Valuation Committee.

Accounting standards establish a framework for measuring fair value and a three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability. Inputs may be observable or unobservable and refer broadly to the assumptions that market participants would use in pricing the asset or liability. Observable inputs 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 reflect the reporting entity's own assumptions about the factors that market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

An individual investment's fair value measurement is assigned a level based upon the observability of the inputs which are significant to the overall valuation.

The three-tier hierarchy of inputs is summarized as follows:

- Level 1 Observable inputs such as quoted prices, available in active markets, for identical assets or liabilities.
- Level 2 Significant other observable inputs, which may include, but are not limited to, quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market corroborated inputs.
- Level 3 Significant unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available, which may include assumptions made by the Board or persons acting at its direction that are used in determining the fair value of investments.

A description of the valuation techniques applied to the Portfolios' major classes of assets and liabilities measured at fair value on a recurring basis follows:

**Asset-Backed Securities and Mortgage-Backed Securities.** The fair value of asset-backed securities and mortgage-backed securities are estimated using recently executed transactions and based on models that consider the estimated cash flows of each debt tranche of the issuer, establish a benchmark yield, and develop an estimated tranche specific spread to the benchmark yield based on the unique attributes of the tranche including, but not limited to, the prepayment speed assumptions and attributes of the collateral. To the extent the inputs are observable and timely, the values would be categorized in Level 2 of the fair value hierarchy, and otherwise they would be categorized as Level 3.

**Bullion.** The fair value of bullion is at the last settlement price at the end of each day on the board of trade or exchange upon which they are traded and are categorized in Level 1 of the fair value hierarchy.

**Corporate Bonds.** The fair value of corporate bonds, as obtained from an independent pricing service, is estimated using various techniques, which consider recently executed transactions in securities of the issuer or comparable issuers, market price quotations (where observable), bond spreads, fundamental data relating to the issuer, and credit default swap spreads adjusted for any basis difference between cash and derivative instruments. While most corporate bonds are categorized in Level 2 of the fair value hierarchy, in instances where lower relative weight is placed on transaction prices, quotations, or similar observable inputs, they are categorized in Level 3 of the fair value hierarchy.

**Derivative Instruments.** Forward foreign currency contracts are valued based upon the closing prices of the forward currency rates determined at the close of the NYSE, which are provided by an independent pricing service. Swaps derive their value from underlying asset prices, indices, reference rates and other inputs or a combination of these factors. Swaps are valued by an independent pricing service unless the price is unavailable, in which case they are valued at the price provided by a dealer in that security. Exchange-traded futures contracts are generally valued at the settlement price. Listed

options are ordinarily valued at the mean of the last bid and ask price provided by an independent pricing service unless the price is unavailable, in which case they are valued at a quotation obtained from a broker-dealer. Over the counter ("OTC") options are ordinarily valued at the mean of the last bid and ask price for a comparable listed option provided by an independent pricing service unless such a price is unavailable, in which case they are valued at a quotation obtained from a broker-dealer.

Listed derivatives that are actively traded are valued based on quoted prices from the exchange and are categorized in Level 1 of the fair value hierarchy. OTC derivative contracts include forward foreign currency contracts, swap agreements, and option contracts related to interest rates, foreign currencies, credit standing of reference entities, equity prices, or commodity prices. Depending on the product and the terms of the transaction, the fair value of the OTC derivative products are modeled taking into account the counterparties' creditworthiness and using a series of techniques, including simulation models. Many pricing models do not entail material subjectivity because the methodologies employed do not necessitate significant judgments and the pricing inputs are observed from actively quoted markets, as is the case with interest rate swap and option contracts. OTC derivative products valued using pricing models with significant observable inputs are categorized within Level 2 of the fair value hierarchy.

**Equity Securities.** Equity securities traded on U.S. or foreign securities exchanges or included in a national market system are valued at the official closing price at the close of each business day unless otherwise stated below. OTC equity securities and listed securities for which no price is readily available are valued at the average of the last bid and ask prices.

Mutual funds, including investment funds, typically are valued at the NAV reported as of the valuation date.

Securities that are stated at the last reported sales price or closing price on the day of valuation taken from the primary exchange where the security is principally traded and to the extent these securities are actively traded and valuation adjustments are not applied, they are categorized in Level 1 of the fair value hierarchy.

Foreign securities, for which the primary trading market closes at the same time or after the NYSE, are valued based on quotations from the primary market in which they are traded and categorized in Level 1. Because many foreign securities markets and exchanges close prior to the close of the NYSE, closing prices for foreign securities in those markets or on those exchanges do not reflect the events that occur after that close. Certain foreign securities may be fair valued using a pricing service that considers the correlation of the trading patterns of the foreign security to the intra-day trading in the U.S. markets for investments such as American Depositary Receipts, financial futures, exchange-traded funds, and the movement of certain indices of securities based on a statistical analysis of their historical relationship; such valuations generally are categorized in Level 2.

Preferred stock, repurchase agreements, and other equities traded on inactive markets or valued by reference to similar instruments are also generally categorized in Level 2.

**Loans.** Loans are valued using a price or composite price from one or more brokers or dealers as obtained from an independent pricing service. The fair value of loans is estimated using recently executed transactions, market price quotations, credit/market events, and cross-asset pricing. Inputs are generally observable market inputs obtained from independent sources. Loans are generally categorized in Level 2 of the fair value hierarchy, unless key inputs are unobservable in which case they would be categorized as Level 3.

**Municipal Bonds.** Municipal bonds are fair valued based on pricing models used by and obtained from an independent pricing service that take into account, among other factors, information received from market makers and broker-dealers, current trades, bid-wants lists, offerings, market movements, the callability of the bond, state of issuance, benchmark yield curves, and bond insurance. To the extent that these inputs are observable and timely, the fair values of municipal bonds would be categorized as Level 2; otherwise the fair values would be categorized as Level 3.

**Restricted Securities.** Restricted securities that are deemed to be Rule 144A securities and illiquid, as well as restricted securities held in non-public entities, are included in Level 3 of the fair value hierarchy to the extent that significant inputs to valuation are unobservable, because they trade infrequently, if at all and, therefore, the inputs are unobservable. Restricted securities that are valued at a discount to similar publicly traded securities may be categorized as Level 2 of the fair value hierarchy to the extent that the discount is considered to be insignificant to the fair value measurement in its entirety; otherwise they may be categorized as Level 3.

**U.S. Government and Agency Securities.** U.S. government and agency securities are normally valued using a model that incorporates market observable data such as reported sales of similar securities, broker quotes, yields, bids, offers, quoted market prices, and reference data. Accordingly, U.S. government and agency securities are normally categorized in Level 2 of the fair value hierarchy depending on the liquidity and transparency of the market.

Transfers from Level 2 to Level 3 occurred primarily due to the lack of observable market data due to decreased market activity or information for these securities. Transfers from Level 3 to Level 2 occurred primarily due to the increased availability of observable market data due to increased market activity or information.

For fair valuations using unobservable inputs, U.S. GAAP requires a reconciliation of the beginning to ending balances for reported fair values that presents changes attributable to total realized and unrealized gains or losses, purchases and sales, and transfers in or out of the Level 3 category during the period. In accordance with the requirements of U.S. GAAP, a fair value hierarchy and Level 3 reconciliation, if any, have been included in the Notes to the Schedule of Investments for each respective Portfolio.

Net realized gain (loss) and net unrealized appreciation (depreciation), shown on the reconciliation of Level 3 investments, if applicable, are included on the Statement of Operations in net realized gain (loss) on investments in unaffiliated and/or affiliated securities and in net change in unrealized appreciation (depreciation) on investments in unaffiliated and/or affiliated securities, respectively. Additionally, the net change in unrealized appreciation (depreciation) for all Level 3 investments still held as of December 31, 2019, if applicable, is included on the Statement of Operations in net change in unrealized appreciation (depreciation) on investments in unaffiliated and/or affiliated securities.

## 4. **DERIVATIVE INSTRUMENTS** (\$ amounts in thousands unless indicated otherwise)

The following disclosures contain information on why and how the Portfolios use derivative instruments, the associated risks of investing in derivative instruments, and how derivative instruments affect the Portfolios' financial positions and results of operations.

**Forward Foreign Currency Contracts.** All Portfolios are authorized to enter into forward foreign currency contracts ("forward contracts") for the purchase or sale of a foreign currency at a negotiated rate at a future date. Forward contracts are reported on a schedule following the Schedule of Investments. Forward contracts are valued daily based upon the closing prices of the forward currency rates provided by an independent pricing service determined at the close of the NYSE. The resulting unrealized appreciation and depreciation is reported on the Statement of Assets and Liabilities as a receivable or payable and on the Statement of Operations within the change in unrealized appreciation (depreciation). At contract close, the difference between the original cost of the contract and the value at the close date is recorded as a realized gain (loss) on the Statement of Operations.

Risks to a Portfolio related to the use of such contracts include both market and credit risk. Market risk is the risk that the value of the forward contract will depreciate due to unfavorable changes in the exchange rates. Credit risk arises from the possibility that the counterparty will default. If the counterparty defaults, a Portfolio's maximum loss will consist of the aggregate unrealized gain on appreciated contracts that is not collateralized.

High Income, International Core Equity and Natural Resources enter into forward foreign currency exchange contracts as an economic hedge against either specific transactions or portfolio instruments or to obtain exposure to, or hedge exposure away from foreign currencies (foreign currency exchange rate risk).

**Option Contracts.** Options purchased by a Portfolio are accounted for in the same manner as portfolio securities. The cost of the underlying instruments acquired through the exercise of call options is increased by the premium paid to purchase the call. The proceeds from instruments sold through the exercise of put options are decreased by the premium paid to purchase the put.

When a Portfolio writes (sells) an option, an amount equal to the premium received by the Portfolio is recorded as a liability. The amount of the liability is subsequently adjusted to reflect the current value of the option written. When an option expires on its stipulated expiration date or a Portfolio enters into a closing purchase transaction, the Portfolio realizes a gain (or loss if the cost of a closing purchase transaction exceeds the premium received when the call option was sold), and the liability related to such option is extinguished. When a written call option is exercised, the premium is added to the proceeds from the sale of the underlying instrument in determining whether a Portfolio has realized a gain or loss. When a written put is exercised, the cost basis of the instruments purchased by a Portfolio is reduced by the amount of the premium received.

Investments in options, whether purchased or written, involve certain risks. Writing put options and purchasing call options may increase a Portfolio's exposure to the underlying instrument. With written options, there may be times when a Portfolio will be required to purchase or sell instruments to meet its obligation under the option contract where the required action is not beneficial to the Portfolio, due to unfavorable movement of the market price of the underlying instrument.

Option contracts can be traded on a regulated exchange or traded OTC. Unlike the trades on a regulated exchange where the clearinghouse guarantees the performances of both the buyer and the seller, to the extent a Portfolio enters into OTC option transactions with counterparties, the Portfolio will be exposed to the risk that counterparties to these OTC transactions will be unable to meet their obligations under the terms of the transaction.

Asset Strategy, Mid Cap Growth and Science and Technology purchase and write call and put options to increase or decrease hedging exposure to underlying instruments (which include credit risk, equity risk, foreign currency exchange rate risk, event risk and/or interest rate risk), increase exposure to various equity markets or certain sectors, gain exposure to or facilitate trading in certain securities and/or, in the case of options written, to generate returns from options premiums.

**Swap Agreements.** All Portfolios are authorized to invest in swap agreements. Swap agreements are bilaterally negotiated agreements between a Portfolio and counterparty to exchange or swap investment cash flows, assets, foreign currencies or market-linked returns at specified, future intervals. Swap agreements are privately negotiated in the over-the-counter market ("OTC swaps"). If the OTC swap entered is one of the swaps identified by a relevant regulator as a swap that is required to be cleared, then it will be cleared through a third party, known as a central counterparty or derivatives clearing organization ("centrally cleared swaps").

Swaps are marked to market daily and changes in value are recorded as unrealized appreciation (depreciation) on the Statement of Operations. Payments received or made by the Portfolio are recorded as realized gain or loss on the Statement of Operations. Any upfront premiums paid are recorded as assets and any upfront fees received are recorded as liabilities and are shown as swap premiums paid and swap premiums received, respectively, if any, on the Statement of Assets and Liabilities and amortized over the term of the swap. An early termination payment received or made at an early termination or a final payment made at the maturity of the swap is recorded as realized gain or loss on the Statement of Operations.

After a centrally cleared swap is accepted for clearing, a Portfolio may be required to deposit initial margin with a Clearing Member in the form of cash or securities. Securities deposited as initial margin, if any, are designated on the Schedule of Investments. Cash deposited as initial margin is identified on the Schedule of Investments and is recorded as restricted cash on the Statement of Assets and Liabilities.

Total return swaps involve a commitment of one party to pay periodic interest payments in exchange for a market-linked return based on a security or a basket of securities including a variety of securities or representing a particular index. To the extent the total return of the security, a basket of securities, or an index exceeds or falls short of the offsetting interest rate obligation, the Portfolio will receive a payment from or make a payment to the counterparty.

Asset Strategy, International Core Equity, Small Cap Core and Small Cap Growth enter into total return swaps to hedge exposure to a security or market.

The creditworthiness of the counterparty with which a Portfolio enters into a swap agreement is monitored by IICO. If a counterparty creditworthiness declines, the value of the agreement would likely decline, potentially resulting in losses. If a default occurs by the counterparty to such a transaction, the Portfolio will have contractual remedies pursuant to the agreement related to the transaction. The maximum loss a Portfolio may incur consists of the aggregate unrealized gain on appreciated contracts that is not collateralized due to facts specific to certain situations (i.e., collateral may not have been posted by the counterparty due to the required collateral amount being less than the pre-agreed thresholds. Additionally, regulatory developments called stay resolutions and the ensuing required contractual amendments to the transactional documentation, including derivatives, permit the relevant regulators to preclude parties to a transaction from terminating trades, among other rights it may have in the trade agreements should a counterparty that it regulates experience financial distress. A relevant regulator also has the authority to reduce the value of certain liabilities owed by the counterparty to a Fund and/or convert cash liabilities of a regulated entity into equity holdings. The power given to the relevant regulators includes the ability to amend transactional agreements unilaterally, modify the maturity of eligible liabilities, reduce the amount of interest payable or change the date on which interest becomes payable, among other powers.

To prevent incurring losses due to the counterparty credit risk, IICO actively monitors the creditworthiness of the counterparties with which it has entered financial transactions. IICO consistently and frequently risk manages the credit risk of the counterparties it faces in transactions.

**Collateral and rights of offset.** A Portfolio mitigates credit risk with respect to OTC derivative counterparties through credit support annexes ("CSA") included with an International Swaps and Derivatives Association, Inc. ("ISDA") Master Agreement which is the standard contract governing all OTC derivative transactions between the Portfolio and each of its counterparties. Although it is not possible to eliminate credit risk entirely, the CSA allows the Portfolio and its counterparty to reduce their exposure to the risk of payment default by the other party by holding an amount in collateral equivalent to the realized and unrealized amount of exposure to the counterparty, which is generally held by the Portfolio's custodian. An amount of collateral is moved to/from applicable counterparties only if the amount of collateral required to be posted surpasses both the threshold and the minimum transfer amount pre-agreed in the CSA between the Portfolio and the counterparty. See Note 2 "Segregation and Collateralization" for additional information with respect to collateral practices.

**Offsetting of Assets and Liabilities.** The following tables present financial instruments that are either (1) offset or (2) subject to an enforceable master netting arrangement or similar agreement as of December 31, 2019:

#### **Assets**

Gross Amounts No	ot Offset on the
Statement of Asset	ts and Liabilities

				21916	ities		
Portfolio		Gross Amounts Offset on the Statement of Assets and Liabilities	Net Amounts of Assets Presented on the Statement of Assets and Liabilities	Financial Instruments and Derivatives Available for Offset	Non-Cash Collateral Received	Cash Collateral Received	Net Amount Receivable
International Core Equity Unrealized appreciation on forward foreign currency contracts <sup>(1)</sup>	\$ 13	\$—	\$ 13	\$(13)	\$—	\$ -	\$—
Natural Resources Unrealized appreciation on forward foreign currency contracts <sup>(1)</sup>	\$ _*	\$—	\$ _*	\$ —*	\$—	\$ -	\$—
Small Cap Growth Swap agreements, at value	\$609	\$—	\$609	\$-	\$—	\$(609)	\$—

<sup>\*</sup>Not shown due to rounding.

#### Liabilities

Gross Amounts Not Offset on the	
Statement of Assets and Liabilities	

			Net Amounts of Liabilities Presented on the Statement of Assets and Liabilities	Stater	Statement of Assets and Liabilities				
Portfolio	Gross Amounts of Recognized Liabilities	Gross Amounts Offset on the Statement of Assets and Liabilities		Financial Instruments and Derivatives Available for Offset	Non-Cash Collateral Pledged	Cash Collateral Pledged	Net Amount Payable		
International Core Equity Unrealized depreciation on forward foreign currency contracts <sup>(1)</sup>	\$1,044	\$—	\$1,044	\$(13)	\$(1,031)	\$ -	\$ -		
Natural Resources Unrealized depreciation on forward foreign currency contracts <sup>(1)</sup>	\$ 904	\$—	\$ 904	\$ —*	\$ -	\$(610)	\$294		

<sup>\*</sup>Not shown due to rounding.

## **Additional Disclosure Related to Derivative Instruments**

Fair values of derivative instruments as of December 31, 2019:

		Assets		Liabilities			
Portfolio	Type of Risk Exposure	Statement of Assets & Liabilities Location	Value	Statement of Assets & Liabilities Location	Value		
International Core Equity	Foreign currency		\$ -	Unrealized depreciation on forward foreign currency contracts	\$833		
Natural Resources	Foreign currency		_	Unrealized depreciation on forward foreign currency contracts	901		
Small Cap Growth	Equity	Swap agreements, at value	609		_		

<sup>(1)</sup>Amounts include forward contracts that have an offset to an open and close contract, but have not settled. These amounts are included on the Statement of Assets and Liabilities line item for Investment securities sold receivable.

<sup>(1)</sup>Amounts include forward contracts that have an offset to an open and close contract, but have not settled. These amounts are included on the Statement of Assets and Liabilities line item for Investment securities purchased payable.

Amount of realized gain (loss) on derivatives recognized on the Statement of Operations for the year ended December 31, 2019:

			Net realized gain (loss) on:							
Portfolio	Type of Risk Exposure	Investments in unaffiliated securities*	Swap agreements	Futures contracts	Written options	Forward foreign currency contracts	Total			
Asset Strategy	Equity	\$ 267	\$ 569	\$—	\$ -	\$ -	\$ 836			
High Income	Foreign currency	_	_	_	_	55	55			
International Core Equity	Equity	_	201	_	_	_	201			
	Foreign currency	_	_	_	_	225	225			
Mid Cap Growth	Equity	2,401	_	_	(88)	_	2,313			
Natural Resources	Foreign currency	_	_	_	_	1,442	1,442			
Science and Technology	Equity	3,720	_	_	(2,276)	_	1,444			
Small Cap Core	Equity	_	(1)	_	_	_	(1)			
Small Cap Growth	Equity	_	1.265	_	_	_	1.265			

<sup>\*</sup> Purchased options are reported as investments in unaffiliated securities and are reflected on the accompanying Schedule of Investments.

Change in unrealized appreciation (depreciation) on derivatives recognized on the Statement of Operations for the year ended December 31, 2019:

		Net change in unrealized appreciation (depreciation) on:							
Portfolio	Type of Risk Exposure	Investments in unaffiliated securities*	Swap agreements	Futures contracts	Written options	Forward foreign currency contracts	Total		
High Income	Foreign currency	\$—	\$ -	\$—	\$—	\$ (14)	\$ (14)		
International Core Equity	Equity	_	(46)	_	_	_	(46)		
	Foreign currency	_	_	_	_	(485)	(485)		
Natural Resources	Foreign currency	_	_	_	_	(1,327)	(1,327)		
Small Cap Growth	Equity	_	1,921	_	_	_	1,921		

<sup>\*</sup> Purchased options are reported as investments in unaffiliated securities and are reflected on the accompanying Schedule of Investments.

During the year ended December 31, 2019, the average derivative volume was as follows:

Portfolio	Forward foreign currency contracts <sup>(1)</sup>	9				
Asset Strategy	. \$ —	\$—	\$—	\$ 968	\$ 23	<u></u>
High Income	. 4	_	_	_	_	_
International Core Equity		_	_	168	_	_
Mid Cap Growth	. –	_	_	_	46	26
Natural Resources		_	_	_	_	_
Science and Technology		_	_	_	558	184
Small Cap Growth		_	_	11,102	_	_

<sup>(1)</sup>Average absolute value of unrealized appreciation/depreciation during the period.

## 5. BASIS FOR CONSOLIDATION OF THE ASSET STRATEGY PORTFOLIO (\$ amounts in thousands)

Ivy VIP ASF II, Ltd. (the "Subsidiary"), a Cayman Islands exempted company, was incorporated as a wholly owned subsidiary acting as an investment vehicle for Ivy VIP Asset Strategy (referred to as "the Portfolio" in this subsection). VIP ASF III (SBP), LLC (the "Company"), a Delaware limited liability company, was incorporated as a wholly owned company acting as an investment vehicle for the Portfolio. The Subsidiary and the Company act as an investment vehicle for the Portfolio, in order to affect certain investments for the Portfolio consistent with the Portfolio's investment objectives and policies as specified in its prospectus and SAI.

<sup>(2)</sup>Average value outstanding during the period.

<sup>(3)</sup>Average notional amount outstanding during the period.

The Portfolio's investment portfolio has been consolidated and includes the portfolio holdings of the Portfolio, its Subsidiary and the Company. The consolidated financial statements include the accounts of the Portfolio, its Subsidiary and the Company. All inter-company transactions and balances have been eliminated. A subscription agreement was entered into between the Portfolio and its Subsidiary and the Company comprising the entire issued share capital of the Subsidiary and the Company with the intent that the Portfolio will remain the sole shareholder and retain all rights. Under the Articles of Association, shares issued by the Subsidiary and the Company confer upon a shareholder the right to receive notice of, to attend and to vote at general meetings of the Subsidiary and the Company and shall confer upon the shareholder rights in a winding-up or repayment of capital and the right to participate in the profits or assets of the Subsidiary and the Company.

See the table below for details regarding the structure, incorporation and relationship as of December 31, 2019 of the Subsidiary and the Company to the Portfolio (amounts in thousands).

Subsidiary/Company	Date of Incorporation			Subsidiary/Company Net Assets	Percentage of Portfolio Net Assets
Ivy VIP ASF II, Ltd	1-31-13	4-10-13	\$772,608	\$44,367	5.74%
VIP ASF III (SBP), LLC	4-9-13	4-23-13	772,608	432	0.01

### 6. INVESTMENT MANAGEMENT AND PAYMENTS TO AFFILIATED PERSONS (\$ amounts in thousands unless indicated otherwise)

**Management Fees.** IICO serves as each Portfolio's investment adviser. The management fee is accrued daily by each Portfolio at the following annual rates as a percentage of average daily net assets:

Portfolio (M — Millions)	\$0 to \$500M				\$2,000 to \$3,000M		\$5,000 to \$10,000M	Over \$10,000M
Asset Strategy	0.700%	0.700%	0.650%	0.650%	0.600%	0.550%	0.550%	0.550%
Balanced	0.700	0.700	0.650	0.650	0.600	0.550	0.550	0.550
Energy	0.850	0.850	0.830	0.830	0.800	0.760	0.760	0.760
Growth	0.700	0.700	0.650	0.650	0.600	0.550	0.550	0.550
High Income	0.625	0.600	0.550	0.500	0.500	0.500	0.500	0.500
International Core Equity	0.850	0.850	0.830	0.830	0.800	0.760	0.760	0.760
Mid Cap Growth	0.850	0.850	0.830	0.830	0.800	0.760	0.760	0.760
Natural Resources	0.850	0.850	0.830	0.830	0.800	0.760	0.730	0.700
Science and Technology	0.850	0.850	0.830	0.830	0.800	0.760	0.760	0.760
Small Cap Core	0.850	0.850	0.830	0.830	0.800	0.760	0.760	0.760
Small Cap Growth	0.850	0.850	0.830	0.830	0.800	0.760	0.760	0.760

IICO has voluntarily agreed to waive a Portfolio's investment management fee on any Portfolio that is not subadvised on any day that the Portfolio's net assets are less than \$25 million, subject to IICO's right to change or modify this waiver. See Expense Reimbursements and/or Waivers for more information.

**Independent Trustees and Chief Compliance Officer Fees.** Fees paid to the Independent Trustees can be paid in cash or deferred to a later date, at the election of the Trustees according to the Deferred Fee Agreement entered into between the Trust and the Trustee(s). Each Portfolio records its portion of the deferred fees as a liability on the Statement of Assets and Liabilities. All fees paid in cash plus any appreciation (depreciation) in the underlying deferred plan are shown on the Statement of Operations. Additionally, fees paid to the Chief Compliance Officer of the Portfolios are shown on the Statement of Operations.

**Accounting Services Fees.** The Trust has an Accounting and Administrative Services Agreement with Waddell & Reed Services Company ("WRSCO"), doing business as WI Services Company ("WISC"). Under the agreement, WISC acts as the agent in providing bookkeeping and accounting services and assistance to the Trust, including maintenance of Portfolio records, pricing of Portfolio shares and preparation of certain shareholder reports. For these services, each Portfolio pays WISC a monthly fee of one-twelfth of the annual fee based on the average net asset levels shown in the following table:

(M — Millions)	\$0 to \$10M								\$750 to \$1,000M	Over \$1,000M
Annual Fee Rate	\$0.00	\$11.50	\$23.10	\$35.50	\$48.40	\$63.20	\$82.50	\$96.30	\$121.60	\$148.50

Each Portfolio also pays WISC a monthly administrative fee at the annual rate of 0.01%, or one basis point, for the first \$1 billion of net assets with no fee charged for net assets in excess of \$1 billion. This fee is voluntarily waived by WISC until a Portfolio's net assets are at least \$10 million and is included in "Accounting services fee" on the Statement of Operations.

**Shareholder Servicing.** Under the Transfer Agency Agreement between the Trust and WISC, each Portfolio reimburses WISC for certain out-of-pocket costs.

**Service Plan. Class II.** Under a Service Plan adopted by the Trust pursuant to Rule 12b–1 under the 1940 Act, each Portfolio may pay a service fee to Ivy Distributors, Inc. ("IDI") for Class II shares in an amount not to exceed 0.25% of the Portfolio's average annual net assets. The fee is to be paid to compensate IDI for amounts it expends in connection with the provision of personal services to Policyowners and/or maintenance of Policyowner accounts.

**Expense Reimbursements and/or Waivers.** IICO, the Portfolios' investment manager, IDI, the Portfolios' distributor, and/or Waddell & Reed Services Company, doing business as WISC, the Portfolios' transfer agent, have contractually agreed to reimburse sufficient management fees, 12b-1 fees and/or shareholder servicing fees to cap the total annual ordinary fund operating expenses (which would exclude interest, taxes, brokerage commissions, acquired fund fees and expenses, and extraordinary expenses, if any). Portfolio and class expense limitations and related waivers/reimbursements for the year ended December 31, 2019 were as follows:

	CI	T				Amount of	F
Fund Name	Share Class Name	Type of Expense Limit	Commencement Date	End Date	Expense Limit	Expense Waiver/ Reimbursement	Expense Reduced
Asset Strategy	Class I	Contractual	4-28-2017	4-30-2020	Class II less 0.25%	\$ -*	12b-1 Fees and/or Shareholder Servicing
Energy	Class I	Contractual	4-28-2017	4-30-2020	Class II less 0.25%	\$ —	N/A
High Income	Class I	Contractual	4-28-2017	4-30-2020	Class II less 0.25%	\$ —	N/A
Mid Cap Growth	All Classes	Contractual	4-28-2017	4-30-2020	N/A	\$242(1)	Investment Management Fee
	Class I	Contractual	4-28-2017	4-30-2020	0.85%	\$ 2	Shareholder Servicing
	Class I	Contractual	4-28-2017	4-30-2020	Class II less 0.25%	\$ —	N/A
	Class II	Contractual	5-1-2012	4-30-2020	1.10%	\$ 16	12b-1 Fees and/or Shareholder Servicing
Science and Technology	Class I	Contractual	4-28-2017	4-30-2020	Class II less 0.25%	\$ —	N/A
Small Cap Growth	All Classes	Contractual	4-28-2017	4-30-2020	N/A	\$ 76(1)	Investment Management Fee
	Class I	Contractual	11-5-2018	4-30-2020	Class II less 0.25%	\$ 1	Shareholder Servicing
	Class II	Contractual	10-1-2016	4-30-2020	1.14%	\$ 15	12b-1 Fees and/or Shareholder Servicing

<sup>\*</sup>Not shown due to rounding.

Any amounts due to the Portfolios as a reimbursement but not paid as of December 31, 2019 are shown as a receivable from affiliates on the Statement of Assets and Liabilities.

#### 7. INTERFUND LENDING PROGRAM

Pursuant to an exemptive order issued by the SEC ("Order"), the Ivy Funds, Ivy Variable Insurance Portfolios and InvestEd Portfolios (collectively, the "Funds" only for purposes of this footnote 7) have the ability to lend money to, and borrow money from, each other pursuant to a master interfund lending agreement ("Interfund Lending Program"). Under the Interfund Lending Program, the Funds may lend or borrow money for temporary purposes directly to or from one another (each an "Interfund Loan"), subject to meeting the conditions of the Order. The interest rate to be charged on an Interfund Loan is the average of the overnight repurchase agreement rate and the short-term bank loan rate. The Funds made no Interfund Loans under the Interfund Lending Program during the year ended December 31, 2019.

<sup>(1)</sup>Due to Class I and/or Class II contractual expense limits, investment management fees were waived for all share classes.

#### 8. AFFILIATED COMPANY TRANSACTIONS (All amounts in thousands)

A summary of the transactions in affiliated companies during the year ended December 31, 2019 follows:

Portfolio	12-31-18 Share Balance	Gross Additions	Gross Reductions	Realized Gain/ (Loss)	Distributions Received	12-31-19 Share Balance	12-31-19 Value	Net Change in Unrealized Appreciation
High Income Larchmont Resources LLC(1)(2)(3)	1	\$—	\$ —	\$—	\$—	1	\$252	\$ —
	12-31-18 Principal Balance				Interest Received	12-31-19 Principal Balance		Net Change in Unrealized Depreciation
Larchmont Resources LLC (8.890% Cash or 8.890% PIK), 8.890%, 8-7-20 <sup>(2)(4)</sup>	\$817	\$—	\$56	\$ 1	\$77	\$757	\$697	\$(47)

<sup>(1)</sup> No dividends were paid during the preceding 12 months.

#### 9. INVESTMENT SECURITIES TRANSACTIONS (\$ amounts in thousands)

The cost of purchases and the proceeds from maturities and sales of investment securities (excluding short-term securities) for the year ended December 31, 2019, were as follows:

	Purcha	ses	Sales		
	U.S. Government	Other Issuers	U.S. Government	Other Issuers	
Asset Strategy	\$ 2,041	\$ 321,150	\$ 7,181	\$ 436,251	
Balanced	29,917	111,232	20,768	146,327	
Energy	_	10,455	_	8,644	
Growth	_	224,922	_	337,541	
High Income	_	287,374	_	309,435	
International Core Equity	_	454,968	_	528,296	
Mid Cap Growth	_	98,056	_	137,716	
Natural Resources	_	30,559	_	36,460	
Science and Technology	_	154,131	_	213,785	
Small Cap Core	_	236,814	_	261,738	
Small Cap Growth	_	153,171	_	188,925	

## 10. LOANS OF PORTFOLIO SECURITIES (\$ amounts in thousands)

The Portfolios may lend their portfolio securities only to borrowers that are approved by the Portfolio's securities lending agent, The Bank of New York Mellon ("BNYM"). The borrower pledges and maintains with the Portfolio collateral consisting of cash or securities issued or guaranteed by the U.S. government. The collateral received by the Portfolio is required to have a value of at least 102% of the market value of the loaned securities for securities traded on U.S. exchanges and a value of at least 105% of the market value for all other securities, except in the case of loans of foreign securities which are denominated and payable in U.S. dollars, in which case the collateral is required to have a value of at least 102% of the market value of the loaned securities. The market value of the loaned securities is determined at the close of each business day and any additional required collateral is delivered to the Portfolio and any excess collateral is returned by the Portfolio on the next business day. During the term of the loan, the Portfolio is entitled to all distributions made on or in respect of the loaned securities but does not receive interest income on securities received as collateral. Loans of securities are terminable at any time and the borrower, after notice, is required to return borrowed securities within the standard time period for settlement of securities transactions.

Cash received as collateral for securities on loan may be reinvested in the Dreyfus Institutional Preferred Government Money Market Fund — Institutional Shares or certain other registered money market funds and are disclosed in the Portfolio's Schedule of Investments and are reflected in the Statement of Assets and Liabilities as cash collateral on securities loaned at value. Non-cash collateral, in the form of securities issued or guaranteed by the U.S. government or its agencies or instrumentalities, is not disclosed in the Portfolio's Statement of Assets and Liabilities as it is held by the lending agent on behalf of the Portfolio and the Portfolio does not have the ability to re-hypothecate these securities. The

<sup>(2)</sup> Securities whose value was determined using significant unobservable inputs.

<sup>(3)</sup> Restricted security.

<sup>(4)</sup> Payment-in-kind bond.

securities on loan for each Portfolio are also disclosed in its Schedule of Investments. The total value of any securities on loan as of December 31, 2019 and the total value of the related cash collateral are disclosed in the Statement of Assets and Liabilities. Income earned by the Portfolios from securities lending activity is disclosed in the Statements of Operations.

The following is a summary of each Portfolio's securities lending positions and related cash and non-cash collateral received as of December 31, 2019:

Portfolio	Market Value of Securities on Loan	Cash Collateral Received	Non-Cash Collateral Received	Total Collateral Received
Asset Strategy	\$ 5,144	\$ 616	\$6,006	\$ 6,622
Balanced	602	_	614	614
High Income		2,193	_	2,193
International Core Equity		76	_	76
Mid Cap Growth		_	3,293	3,293
Natural Resources		2,806	_	2,806
Science and Technology	5,497	_	5,608	5,608
Small Cap Core		4,768	40	4,808
Small Cap Growth	13,293	1,607	11,961	13,568

The cash collateral received amounts presented in the table above are transactions accounted for as secured borrowings and have an overnight and continuous maturity. The proceeds from the cash collateral received is invested in registered money market funds.

The risks of securities lending include the risk that the borrower may not provide additional collateral when required or may not return the securities when due. To mitigate these risks, the Portfolios benefit from a borrower indemnity provided by BNYM. BNYM's indemnity allows for full replacement of securities lent wherein BNYM will purchase the unreturned loaned securities on the open market by applying the proceeds of the collateral or to the extent such proceeds are insufficient or the collateral is unavailable, BNYM will purchase the unreturned loan securities at BNYM's expense. However, the Portfolio could suffer a loss if the value of the investments purchased with cash collateral falls below the value of the cash collateral received.

#### 11. BORROWINGS

On May 24, 2019 the Trust, on behalf of High Income, along with certain other funds managed by the investment adviser ("Participating Funds"), entered into a 364-day senior unsecured revolving credit facility with Bank of New York Mellon and a group of financial institutions to be utilized to temporarily finance the repurchase or redemption of Fund shares and for other temporary or emergency purposes. The Participating Funds can borrow up to an aggregate commitment amount of \$130 million at any time outstanding, subject to asset coverage and other limitations as specified in the agreement. The credit facility has the following terms: a commitment fee of 0.15% per annum of the daily amount of unused commitment amounts and interest at a rate equal to the higher of (a) the federal funds effective rate (but not below 0.0%) plus 1.00% per annum or (b) the one-month LIBOR rate (but not below 0.0%) plus 1.00% per annum on amounts borrowed. The agreement expires in May 2020 unless extended or renewed. As of December 31, 2019, if applicable, any outstanding borrowings would be disclosed as a payable for borrowing on the Statement of Assets and Liabilities. Commitment and interest fees, if any, paid by the Participating Funds are disclosed as part of commitment and interest expense for borrowing on the Statement of Operations. During the year ended December 31, 2019, the Participating Funds did not borrow under the credit facility.

# 12. CAPITAL SHARE TRANSACTIONS (All amounts in thousands)

The Trust has authorized an unlimited number of no par value shares of beneficial interest. Transactions in shares of beneficial interest were as follows:

	Asset Strategy				Bala	nced		
		ended 31-19		ended 31-18		ended 31-19		ended -31-18
	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Shares issued from sale of shares: Class I Class II Shares issued in reinvestment of distributions to	1,784	\$ — 16,459	1 3,140	\$ 9 29,977	N/A 1,682	N/A \$ 13,146	N/A 1,416	N/A \$ 11,226
shareholders: Class I Class I Class I Class I	2 4,849 _*	20 45,846 *	2 5,872 *	18 49,202 _*	N/A 4,279 N/A	N/A 31,681 N/A	N/A 1,388 N/A	N/A 10,863 N/A
Class II	(16,162)	(148,939)	(18,070)	(171,936)	(6,122)	(47,906)	(6,760)	(53,838)
Net decrease	(9,527)	\$ (86,614)	(9,055)	\$ (92,730)	(161)	\$ (3,079)	(3,956)	\$ (31,749)
		Ene	rav			Gro	wth	
		ended 31-19	Year	ended 31-18		ended 31-19	Year	ended -31-18
	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Shares issued from sale of shares:  Class I  Class II  Shares issued in reinvestment of distributions to shareholders:	5 4,050	\$ 21 16,320	8 5,435	\$ 32 31,159	N/A 936	N/A \$ 10,589	N/A 1,679	N/A \$ 20,421
Class I	_ _		_ _		N/A 18,896	N/A 186,937	N/A 8,478	N/A 99,828
Class I	(9) (3,772)	(34) (15,434)	_* (24,018)	_* (137,602)	N/A (10,740)	N/A (120,227)	N/A (22,501)	N/A (274,185)
Net increase (decrease)	274	\$ 873	(18,575)	\$ (106,411)	9,092	\$ 77,299	(12,344)	\$(153,936)
		ψ 0.0	(.0,070)	Ψ (100, 111)		<del>+,===</del>	(.=,0)	4(.00,000)
		High Ir	ncome			Internationa	l Core Equ	ıity
		ended 31-19		ended 31-18		ended 31-19		ended -31-18
	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Shares issued from sale of shares: Class I Class II Shares issued in reinvestment of distributions to	765 26,909	\$ 2,711 92,614	1,713 32,626	\$ 5,956 116,310	N/A 2,003	N/A \$ 30,385	N/A 4,963	N/A \$ 83,359
shareholders: Class I Class II Shares redeemed:	936 16,418	3,156 55,287	1,015 16,234	3,506 56,012	N/A 4,945	N/A 70,370	N/A 1,813	N/A 32,980
Class I	(7,167) (36,409)	(24,449) (125,215)	(4,836) (52,101)	(16,926) (184,346)	N/A (8,396)	N/A (126,858)	N/A (5,580)	N/A (97,507)
Net increase (decrease)	1,452	\$ 4,104	(5,349)	\$ (19,488)	(1,448)	\$ (26,103)	1,196	\$ 18,832
		•						-

<sup>\*</sup>Not shown due to rounding.

	Mid Cap Growth				Natural R	esources		
	Year ended 12-31-19		Year ended 12-31-18		Year ended 12-31-19			ended 31-18
	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Shares issued from sale of shares:  Class I  Class II  Shares issued in reinvestment of distributions to	1,304 5,186	\$ 16,178 64,074	7,297 7,032	\$ 90,379 87,767	N/A 3,518	N/A \$ 13,191	N/A 3,428	N/A \$ 15,087
shareholders:	3,171	35,378	534	6,483	N/A	N/A	N/A	N/A
Class II	4,217	46,820	1,911	23,180	229	870	75	351
Class I	(2,828) (5,347)	(34,889) (66,009)	(2,531) (38,548)	(31,811) (467,934)	N/A (5,896)	N/A (22,418)	N/A (6,932)	N/A (30,567)
Net increase (decrease)	5,703	\$ 61,552	(24,305)	\$(291,936)	(2,149)	\$ (8,357)	(3,429)	\$ (15,129)
		Science and	d Technolo	gy		Small C	ap Core	
		ended 31-19		ended 31-18		ended 31-19		ended 31-18
	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Shares issued from sale of shares:  Class I  Class II  Shares issued in reinvestment of distributions to	5 2,087	\$ 144 58,421	6 2,736	\$ 184 79,209	N/A 564	N/A \$ 7,839	N/A 841	N/A \$ 13,662
shareholders: Class I	3 1,692	80 49,737	4 2,937	85 65,600	N/A 2,817	N/A 36,690	N/A 3,561	N/A 56,235
Class I	_* (3,995)	(17) (110,540)	(1) (9,856)	(26) (284,003)	N/A (2,655)	N/A (36,555)	N/A (8,646)	N/A (141,910)
Net increase (decrease)	(208)	\$ (2,175)	(4,174)	\$ (138,951)	726	\$ 7,974	(4,244)	\$(72,013)
		Small Ca	ap Growth					
		ended 31-19		ended 31-18				
	Shares	Value	Shares	Value				
Shares issued from sale of shares:  Class I  Class II  Shares issued in connection with merger:	477 2,202	\$ 4,296 19,523	6,845 3,202	\$ 58,514 32,902				
Class I	N/A N/A	N/A N/A	56 9,666	487 84,646				
shareholders: Class I Class II Shares redeemed:	489 2,841	4,305 24,945	_ 12,302	_ 117,993				
Class I	(1,198) (6,327)	(10,725) (56,749)	(123) (18,536)	(980) (187,990)				
Net increase (decrease)	(1,516)	\$ (14,405)	13,412	\$ 105,572				

\*Not shown due to rounding.

#### 13. COMMITMENTS

Bridge loan commitments may obligate a Portfolio to furnish temporary financing to a borrower until permanent financing can be arranged. In connection with these commitments, the Portfolio earns a commitment fee, typically set as a percentage of the commitment amount. Such fee income is included in interest income on the Statements of Operations. At December 31, 2019, there were no outstanding bridge loan commitments.

## 14. FEDERAL INCOME TAX MATTERS (\$ amounts in thousands)

For Federal income tax purposes, cost of investments owned at December 31, 2019 and the related unrealized appreciation (depreciation) were as follows:

Portfolio	Cost of Investments	Gross Appreciation	Gross Depreciation	Appreciation (Depreciation)
Asset Strategy	\$727,863	\$ 116,007	\$73,478	\$ 42,529
Balanced	295,431	46,967	2,183	44,784
Energy	54,046	1,775	14,512	(12,737)
Growth	544,537	249,624	3,439	246,185
High Income	929,758	29,314	82,641	(53,327)
International Core Equity	703,632	54,901	61,521	(6,620)
Mid Cap Growth	403,027	154,507	10,127	144,380
Natural Resources	100,344	6,000	15,462	(9,462)
Science and Technology	317,265	272,236	9,070	263,166
Small Cap Core	175,685	19,695	2,629	17,066
Small Cap Growth	301,988	97,259	9,471	87,788

For Federal income tax purposes, the Portfolios' undistributed earnings and profit for the year ended December 31, 2019 and the post-October and late-year ordinary activity updated with information available through the date of this report were as follows:

Portfolio	Undistributed Ordinary Income	Undistributed Long-Term Capital Gains	Tax Return of Capital	Post- October Capital Losses Deferred	Late-Year Ordinary Losses Deferred
Asset Strategy	\$ 1,311	\$ 1,768	\$—	\$ —	\$—
Balanced	4,355	17,231	_	_	_
Energy	168	_	_	_	_
Growth	13,692	98,774	_	_	_
High Income	58,257	_	_	_	_
International Core Equity	14,565	111	_	_	_
Mid Cap Growth	5,351	33,888	_	_	_
Natural Resources	1,603	_	_	_	_
Science and Technology	992	23,177	_	_	_
Small Cap Core	1,998	6,738	_	_	_
Small Cap Growth	_	_	_	147	_

Internal Revenue Code regulations permit each Portfolio to elect to defer into its next fiscal year capital losses and certain specified ordinary items incurred between each November 1 and the end of its fiscal year. Each Portfolio is also permitted to defer into its next fiscal certain ordinary losses that generated between each January 1 and the end of its fiscal year.

The tax character of dividends and distributions paid during the two fiscal years ended December 31, 2019 and 2018 were as follows:

	December 31, 2019		Decembe	r 31, 2018
Portfolio	Distributed Ordinary Income <sup>(1)</sup>	Distributed Long-Term Capital Gains	Distributed Ordinary Income <sup>(1)</sup>	Distributed Long-Term Capital Gains
Asset Strategy	\$ 15,765 6.330	\$ 30,101 25.351	\$15,495 5.473	\$33,725 5.390
Balanced Energy	0,330	25,351	5,475	5,390
Growth	4,140	182,797	811	99,017
High Income	58,443	, <u> </u>	59,518	, <u> </u>
International Core Equity	13,997	56,373	28,472	4,508
Mid Cap Growth	_	82,198	2,816	26,847
Natural Resources	870	_	351	_
Science and Technology	1,227	48,590	_	65,685
Small Cap Core	12,737	23,953	27,706	28,529
Small Cap Growth	_	29,250	20,961	97,032

(1)Includes short-term capital gains, if any.

Dividends from net investment income and short-term capital gains are treated as ordinary income dividends for federal income tax purposes.

Accumulated capital losses represent net capital loss carryovers as of December 31, 2019 that may be available to offset future realized capital gains and thereby reduce future capital gains distributions. As of December 31, 2019, the capital loss carryovers were as follows:

Portfolio	Short-Term Capital Loss Carryover	Long-Term Capital Loss Carryover
Asset Strategy	\$ —	\$ —
Balanced	_	_
Energy	11,755 <sup>(1)</sup>	26,541 <sup>(1)</sup>
Growth	_	_
High Income	_	61,563
International Core Equity	_	_
Mid Cap Growth	_	_
Natural Resources	7,291	45,325
Science and Technology	_	_
Small Cap Core	_	_
Small Cap Growth	_	_

(1)\$29,983 of these Capital Loss Carryovers are subject to an annual limitation of \$3,708 plus any unused limitation from prior years.

Net investment income dividends and capital gains distributions are determined in accordance with income tax regulations which may differ from U.S. GAAP. These differences are due to differing treatments for items such as deferral of wash sales, post-October losses, late-year ordinary losses, foreign currency transactions, net operating losses, income from passive foreign investment companies (PFICs), investments held within the wholly-owned subsidiary and companies, partnership transactions and in-kind redemptions. At December 31, 2019, the following reclassifications were made:

Portfolio	Accumulated Earnings Gain (Loss)	Paid-In Capital
Asset Strategy	\$ -	\$ —
Balanced	_*	_*
Energy	(459)	459
Growth	_	_
High Income	*	_*
International Core Equity	_	_
Mid Cap Growth	(126)	126
Natural Resources	1	(1)
Science and Technology	_	_
Small Cap Core	_	_
Small Cap Growth	1,358	(1,358)

\*Not shown due to rounding.

To the Shareholders and Board of Trustees of Ivy Variable Insurance Portfolios:

Opinion on the Financial Statements and Financial Highlights

We have audited the accompanying statements of assets and liabilities of Ivy VIP Asset Strategy, Ivy VIP Balanced, Ivy VIP Energy, Ivy VIP Growth, Ivy VIP High Income, Ivy VIP International Core Equity, Ivy VIP Mid Cap Growth, Ivy VIP Natural Resources, Ivy VIP Science and Technology, Ivy VIP Small Cap Core, and Ivy VIP Small Cap Growth, eleven of the series constituting the Ivy Variable Insurance Portfolios (the "Funds"), including the schedules of investments, as of December 31, 2019, the related statements of operations for the year then ended, the statements of changes in net assets for each of the two years in the period then ended, and the related notes. In our opinion, the financial statements and financial highlights present fairly, in all material respects, the financial position of the Funds as of December 31, 2019, and the results of their operations for the year then ended, the changes in their net assets for each of the two years in the period then ended, and the financial highlights for each of the five years in the period then ended in conformity with accounting principles generally accepted in the United States of America.

#### Basis for Opinion

These financial statements and financial highlights are the responsibility of the Funds' management. Our responsibility is to express an opinion on the Funds' 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. The Funds are not required to have, nor were we engaged to perform, an audit of their internal control over financial reporting. As part of our audits we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Funds' internal control over financial reporting. Accordingly, we express no such opinion.

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. 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. Our procedures included confirmation of securities owned as of December 31, 2019, by correspondence with the custodian, agent banks, and brokers; when replies were not received from brokers, we performed other auditing procedures. We believe that our audits provide a reasonable basis for our opinion.

Deloitte & Touche LLP

Kansas City, Missouri February 14, 2020

We have served as the auditor of one or more Waddell & Reed investment companies since 1997.

AMOUNTS NOT ROUNDED (UNAUDITED)

The Portfolios hereby designate the following amounts of dividends paid from net ordinary income as dividends qualifying for the 70% dividends received deduction for corporations for the tax period ended December 31, 2019:

	Received Deduction for Corporations
Asset Strategy	\$3,406,450
Balanced	4,458,742
Energy	_
Growth	4,139,160
High Income	1,330,507
International Core Equity	_
Mid Cap Growth	_
Natural Resources	869,454
Science and Technology	1,227,384
Small Cap Core	1,544,050
Small Cap Growth	_

The Portfolios hereby designate the following amounts as distributions of long-term capital gains:

Balanced	\$ 30,101,622 25,350,906
Energy	_
Growth	182,796,812
High Income	_
International Core Equity	56,372,903
Mid Cap Growth	82,197,639
Natural Resources	_
Science and Technology	48,589,986
Small Cap Core	23,953,069(1)
Small Cap Growth	29,249,969

(1)Of this amount \$13,024 is Unrecaptured Section 1250 Gain.

Internal Revenue Code regulations permit each qualifying Portfolio to elect to pass through a foreign tax credit to shareholders with respect to foreign taxes paid by the Portfolio. Each Portfolio elected to pass the following amounts of creditable foreign taxes through to their shareholders:

	Foreign Tax Credit	Foreign Derived Income
International Core Equity	\$1,440,560	\$18,481,961

(UNAUDITED)

Each of the individuals listed below serves as a trustee for the Trust (28 portfolios), and for the rest of the funds within the Fund Complex, which also includes, in addition to the Trust, the Ivy Funds (45 portfolios), the Ivy High Income Opportunities Fund (a closed-end fund) ("IVH") and InvestEd Portfolios ("InvestEd") (6 portfolios).

Board members who are not "interested persons" of the Funds as defined in Section 2(a)(19) of the 1940 Act (Disinterested Trustees) constitute at least 75% of the Board.

Joseph Harroz, Jr. serves as the Independent Chairman of the Trust's Board and of the Board of Trustees of the other funds in the Fund Complex. Subject to the Trustee Emeritus and Retirement Policy, a Trustee serves until his or her successor is elected and qualified or until his or her earlier death, resignation or removal.

The Statement of Additional Information (the "SAI") for the Trust includes additional information about the Trust's trustees. The SAI is available without charge, upon request, by calling 1.888.923.3355. It is also available on the Ivy Investments website, www.ivyinvestments.com.

#### **Disinterested Trustees**

Name, Address and Year of Birth	Position(s) Held with the Trust	Trustee Since	Principal Occupation(s) During Past 5 Years	Other Directorships Held
James M. Concannon 6300 Lamar Avenue Overland Park, KS 66202 1947	Trustee	1997	Emeritus Dean and Professor of Law, Washburn University School of Law (1973 to present).	Director, Kansas Legal Services for Prisoners, Inc. (non-profit community service); Director, U.S. Alliance Corporation and wholly-owned subsidiaries: U.S. Alliance Life and Security Company — Montana and Dakota Capital Life Insurance Company (Insurance) (2009 to present); Director, Kansas Appleseed, Inc. (non-profit community service) (2007 to present); Trustee, WRA Funds (1997-2018); Trustee, Ivy NextShares (2017-2019); Trustee, InvestEd (2001 to present) (6 portfolios overseen); Trustee, Ivy Funds (2017 to present) (45 portfolios overseen); Trustee, IVH (2017 to present) (1 portfolio overseen).
H. Jeffrey Dobbs 6300 Lamar Avenue Overland Park, KS 66202 1955	Trustee	2019	Global Sector Chairman, Industrial Manufacturing, KPMG LLP (2010-2015).	Director, Valparaiso University (2012 to present); Director, TechAccel LLC (2015 to present) (Tech R&D); Board Member, Kansas City Repertory Theatre (2015 to present); Board Member, PatientsVoices, Inc. (technology) (2018 to present); Board Member, Kansas City Campus for Animal Care (2018 to present); Director, National Association of Manufacturers (2010-2015); Director, The Children's Center (2003-2015); Director, Metropolitan Affairs Coalition (2003-2015); Director, Michigan Roundtable for Diversity and Inclusion (2003-2015); Trustee, Ivy NextShares (2019); Trustee, Ivy NextShares (2019) to present) (45 portfolios overseen); Trustee, Ivy Funds (2019 to present) (11 portfolio overseen).
James D. Gressett 6300 Lamar Avenue Overland Park, KS 66202 1950	Trustee	2017	Chief Executive Officer (CEO) of CalPac Pizza LLC (2011 to present); CEO of CalPac Pizza II LLC (2012 to present); CEO of PacPizza LLC (Pizza Hut franchise) (2000 to present); Member/CEO, Southern Pac Pizza LLC (2013 to present); Partner, Century Bridge Partners (real estate investments) (2007 to present); Manager, Hartley Ranch Angus Beef, LLC (2013 to present); President, Penn Capital Corp. (1995 to present); Partner, Penn Capital Partners (1999 to present); Partner, 1788 Chicken, LLC (food franchise) (2016 to present).	Member/Secretary, The Metochoi Group LLC (1999 to present); Member/Chairman, Idea Homes LLC (homebuilding and development) (2013 to present); Trustee, WRA Funds (2017-2018); Trustee, Ivy NextShares (2016-2019); Trustee, InvestEd (2017 to present) (6 portfolios overseen); Trustee, Ivy Funds (2002 to present) (45 portfolios overseen); Trustee; IVH (2013 to present) (1 portfolio overseen).

Name, Address and Year of Birth	Position(s) Held w the Trust	rith Trustee Since	Principal Occupation(s) During Past 5 Years	Other Directorships Held
Joseph Harroz, Jr. 6300 Lamar Avenue Overland Park, KS 66202 1967	Trustee Independent Chairman	1998 2015	Interim President (2019 to present), Vice President (2010-2019) and Dean (2010-2019), College of Law, University of Oklahoma; Managing Member, Harroz Investments, LLC, (commercial enterprises) (1998 to present).	Director and Shareholder, Valliance Bank (2007 to present); Director, Foundation Healthcare (formerly Graymark HealthCare)
Glendon E. Johnson, Jr. 6300 Lamar Avenue Overland Park, KS 66202 1951	Trustee	2017	Of Counsel, Lee & Smith, PC (law firm, emphasis on finance, securities, mergers and acquisitions law) (1996 to 2019); Owner and Manager, Castle Valley Ranches, LLC (ranching) and Castle Valley Outdoors, LLC (outdoor recreation) (1995 to present); Formerly, Partner, Kelly, Drye & Warren LLP (law firm) (1989-1996); Partner, Lane & Edson PC (law firm) (1987-1989).	Director, Thomas Foundation for Cancer Research (non-profit) (2005 to present); Director, Warriors Afield Legacy Foundation (non-profit) (2014 to present); Trustee, WRA Funds (2017-2018); Trustee, Ivy NextShares (2016-2019); Trustee, InvestEd (2017 to present) (6 portfolios overseen); Trustee, Ivy Funds (2002 to present) (45 portfolios overseen); Trustee, IVH (2013 to present) (1 portfolio overseen).
Sandra A.J. Lawrence 6300 Lamar Avenue Overland Park, KS 66202 1957	Trustee	2019	Retired, formerly, Chief Administrative Officer, Children's Mercy Hospitals and Clinics (2016-2019); CFO, Children's Mercy Hospitals and Clinics (2005-2016).	Director, Hall Family Foundation (1993 to present); Director, Westar Energy (2004-2018); Trustee, Nelson-Atkins Museum of Art (non-profit) (2007 to present); Director, Turn the Page KC (non-profit) (2012-2016); Director, Kansas Metropolitan Business and Healthcare Coalition (non-profit) (2017-2019); Director, National Association of Corporate Directors (non-profit) (2017 to present); Director, American Shared Hospital Services (2017 to present); Director, Evergy, Inc., Kansas City Power & Light Company, KCP&L Greater Missouri Operations Company, Westar Energy, Inc. and Kansas Gas and Electric Company (related utility companies) (2018 to present); Director, Stowers (research) (2018); Trustee, Ivy NextShares (2019); Trustee, InvestEd (2019 to present) (45 portfolios overseen); Trustee, Ivy Funds (2019 to present) (45 portfolios overseen); Trustee, IVH (2019 to present) (1 portfolio overseen).
Frank J. Ross, Jr. Polsinelli PC 900 West 48th Place, Suite 900 Kansas City, MO 64112 1953	Trustee	1996	Shareholder/Director, Polsinelli PC (law firm) (1980 to present).	Trustee, WRA Funds (1996-2018); Trustee, lvy NextShares (2017-2019); Trustee, InvestEd (2001 to present) (6 portfolios overseen); Trustee, lvy Funds (2017 to present) (45 portfolios overseen); Trustee, IVH (2017 to present) (1 portfolio overseen).

Name, Address and Year of Birth	Position(s) Held with the Trust	Trustee Since	Principal Occupation(s) During Past 5 Years	Other Directorships Held
Michael G. Smith 6300 Lamar Avenue Overland Park, KS 66202 1944	Trustee	2017	Retired; formerly, with Merrill Lynch as Managing Director of Global Investor Client Strategy (1996-1998), Head of Regional Institutional Sales (1995-1996) and of U.S. Central Region (1986-1995, 1999).	Director, Executive Board, Cox Business School, Southern Methodist University (1998-2019); Lead Director, Northwestern Mutual Funds (2003-2017) (29 portfolios overseen); Director, CTMG, Inc. (clinical testing) (2008-2015); Trustee, WRA Funds (2017-2018); Trustee, Ivy NextShares (2016-2019); Trustee, InvestEd (2017 to present) (6 portfolios overseen); Trustee, Ivy Funds (2002 to present) (45 portfolios overseen); Trustee, IVH (2013 to present) (1 portfolio overseen).
Edward M. Tighe 6300 Lamar Avenue Overland Park, KS 66202 1942	Trustee	2017	Retired; formerly, CEO and Director of Asgard Holdings, LLC (computer network and security services) (2002-2004); President, Citco Technology Management (1995-2000); CEO, Global Mutual Fund Services (1993-2000); Sr. Vice President, Templeton Global Investors (1988-1992).	Trustee, Hansberger Institutional Funds (2000-2007); Director, The Research Coast Principium Foundation, Inc. (non-profit) (2012-2015); Trustee, WRA Funds (2017-2018); Trustee, Ivy NextShares (2016-2019); Trustee, InvestEd (2017 to present) (6 portfolios overseen); Trustee, Ivy Funds (1999 to present) (45 portfolios overseen); Trustee, IVH (2013 to present) (1 portfolio overseen).

#### **Interested Trustees**

Messrs. Herrmann and Sanders are "interested" by virtue of their former engagement as an officer of Waddell & Reed Financial, Inc. ("WDR") or its wholly-owned subsidiaries, including each Fund's investment manager, Ivy Investment Management Company ("IICO"), each Fund's principal underwriter, Ivy Distributors, Inc. ("IDI"), and each Fund's shareholder servicing and accounting services agent, Waddell & Reed Services Company, doing business as WI Services Company ("WISC"), a subsidiary of Waddell & Reed, Inc. ("Waddell & Reed"), as well as by virtue of their personal ownership of shares of WDR. The address for each Interested Trustee and each of the officers in the following tables is 6300 Lamar Avenue, Overland Park, KS 66202.

Name and Year of Birth	Position(s) Held with the Trust	Trustee Since	Principal Occupation(s) During Past 5 Years	Other Directorships Held
Henry J. Herrmann 1942	Trustee	1998	Retired, Non-Executive Chairman of the Board, WDR (2016-2018); Formerly Chairman, WDR (2010-2018); CEO, WDR (2005-2016); President, CEO and Chairman, IICO (2002-2016); President, CEO and Chairman, Waddell & Reed Investment Management Company (WRIMCO) (1993-2016); President of each of the funds in the Fund Complex (2001-2016).	Director, WDR, (1998 to present); Director, IICO (2002-2016); Director, WRIMCO (1991-2016); Director, WISC (2001-2016); Director, W&R Capital Management Group, Inc. (2008-2016); Director, Waddell & Reed (1993-2016); Director, Waddell & Reed (1993-2016); Director, Blue Cross Blue Shield of Kansas City (2007-2017); Trustee, WRA Funds (1998-2018); Trustee, Ivy NextShares (2016-2019); Trustee, InvestEd (2001 to present) (6 portfolios overseen); Trustee, Ivy Funds (1998 to present) (45 portfolios overseen); Trustee, IVH (2013 to present) (1 portfolio overseen).
Philip J. Sanders 1959	Trustee	2019	CEO, WDR (2016 to present); President, CEO and Chairman, IICO (2016 to present); President of each of the funds in the Fund Complex (2016 to present); CIO, WDR (2011-2019); CIO, IICO (2010-2019).	Trustee, Ivy NextShares (2019); Trustee, InvestEd (2019 to present) (6 portfolios overseen); Trustee, Ivy Funds (2019 to present) (45 portfolios overseen); Trustee, IVH (2019 to present) (1 portfolio overseen).

## **Officers**

The Board has appointed officers who are responsible for the day-to-day business decisions based on policies it has established. The officers serve at the pleasure of the Board. The Trust's principal officers are:

Name and Year of Birth	Position(s) Held with The Trust	Officer of Trust Since	Officer of Fund Complex Since*	Principal Occupation(s) During Past 5 Years
Jennifer K. Dulski 1980	Secretary	2017	2017	Secretary for each of the funds in the Fund Complex (2017 to present); Senior Vice President and Associate General Counsel of Waddell & Reed, IICO and IDI (2018 to present).
Joseph W. Kauten 1969	Vice President	2009	2006	Principal Financial Officer of each of the funds in the Fund Complex (2007 to present); Vice President and
	Treasurer	2009	2006	Treasurer of each of the funds in the Fund Complex (2006 to present); Principal Accounting Officer of each of
	Principal Financial Officer	2009	2007	the funds in the Fund Complex (2006-2017); Assistant Treasurer of each of the funds in the Fund Complex (2003-2006); Vice President of Waddell & Reed Services Company (WRSCO) (2007 to present).
Philip J. Sanders** 1959	President	2016	2016	CEO of WDR (2016 to present); President, CEO and Chairman of IICO (2016 to present) and WRIMCO (2016-2018); President of each of the funds in the Fund Complex (2016 to present); CIO of WDR (2011-2019); CIO of IICO (2010-2019) and WRIMCO (2010-2018).
Scott J. Schneider 1968	Vice President	2009	2006	Chief Compliance Officer (2004 to present) and Vice President (2006 to present) of each of the funds in the
	Chief Compliance Officer	2009	2004	Fund Complex; Vice President of IICO (2006 to present) and WRIMCO (2006-2018).
Philip A. Shipp 1969	Assistant Secretary	2012	2012	Assistant Secretary of each of the funds in the Fund Complex (2012 to present); Vice President of Waddell & Reed and IDI (2010-present).

<sup>\*</sup>This is the date when the Officer first became an officer of one or more of the funds that are the predecessors to current funds within the Fund Complex (if applicable).
\*\*Mr. Sanders was Vice President of the Trust since 2006, and of the other Trusts within the Fund Complex, until his appointment as President in 2016.

(UNAUDITED)

At a meeting of the Board of Trustees (the "Board") of Ivy Variable Insurance Portfolios (the "Trust") held on August 13<sup>th</sup> and 14<sup>th</sup>, 2019, the Board, including all of the trustees who are not "interested persons" (the "Independent Trustees"), as defined in Section 2(a)(19) of the Investment Company Act of 1940, as amended (the "1940 Act"), unanimously approved the continuance of the Investment Management Agreement (the "Management Agreement") between Ivy Investment Management Company ("IICO") and the Trust, and the continuance of the Investment Subadvisory Agreement between IICO and Securian Asset Management, Inc. (the "Subadviser") with respect to Ivy VIP Securian Real Estate Securities, Ivy VIP Pathfinder Moderate – Managed Volatility, Ivy VIP Pathfinder Moderately Aggressive – Managed Volatility and Ivy VIP Pathfinder Moderately Conservative – Managed Volatility. The Management Agreement and the Investment Subadvisory Agreement are referred to collectively herein as the "Agreements."

The Board's Independent Trustees were assisted in their review by independent legal counsel and met with such counsel separately from representatives of IICO and the Subadviser. Independent legal counsel explained the factors that the Board should consider as part of its review of the Agreements, all as outlined in a memorandum it had provided to the Board prior to the meeting, including, among other things, the nature and the quality of the services provided by IICO and the Subadviser, profitability (including any fall-out benefits) from IICO's and the Subadviser's relationships with each series of the Trust (each, a "Fund" and together, the "Funds"), economies of scale, the role played by the Independent Trustees, and information on comparative fees and expenses. The Independent Trustees also considered the written responses and materials produced by IICO and the Subadviser in response to 15(c) due diligence request lists submitted by the Independent Trustees' legal counsel prior to the meeting, as well as materials produced in response to a follow-up request list sent to IICO by independent legal counsel on behalf of the Independent Trustees. Included in those responses, which had been provided to the Board prior to the meeting, was a Fund-by-Fund profitability analysis prepared by IICO, as well as an explanation of the methodology by which the profitability analysis was calculated. The Board also received extensive materials on performance, expenses and comparable fund information from Broadridge, Inc. ("Broadridge"), an independent mutual fund rating service. Finally, the Independent Trustees received and reviewed a considerable amount of information that their independent fee consultant had provided to them. The Independent Trustees previously had reviewed and discussed these materials during a telephonic meeting in July 2019. They further reviewed these materials among themselves, with their independent legal counsel and the independent fee consultant, and with the other Board members at executive sessions of the Independent Trustees at the August 13-14, 2019 Board meeting, during which the Board considered various factors described below, none of which by itself was considered dispositive. However, the material factors and conclusions that formed the basis for the Board's determination to approve the Agreements are discussed separately below.

## **Nature, Extent and Quality of Services**

The Board considered the nature, extent and quality of services provided to the Funds by IICO and the Subadviser, taking into account the large amount of materials produced by IICO and the Subadviser in response to the 15(c) due diligence requests submitted on its behalf by independent legal counsel to the Independent Trustees.

The Board also took into account the report from its Investment Oversight Committee (the "IOC"), in light of that committee's duties to assist the Board in the 15(c) process. The IOC had reported to the Board on its review of the performance of the Funds, IICO's investment risk management function, and the changes IICO and its affiliates have been undertaking for the Trust and the overall fund complex. As such, the Board examined all of IICO's activities in light of performance and expense structure, as well as the overall rationalization of the fund complex (both completed and/or proposed), which is designed to provide economies of scale to the shareholders, reduce the Funds' expenses and enhance the performance of the Funds, particularly in the context of substantial industry change and regulatory developments.

The Board likewise considered the knowledge it had received from its regular meetings, including from the materials provided in connection with those meetings, such as the resources and key personnel of IICO and the Subadviser, as well as the other services provided to the Funds by IICO and the Subadviser, as applicable (e.g., managing the quality of execution of portfolio transactions and the selection of broker-dealers for those transactions, monitoring adherence to each Fund's investment restrictions, producing reports, providing support services for the Board and its committees, communicating with shareholders and overseeing the activities of other service providers, including monitoring compliance with various Fund policies and procedures and with applicable laws and regulations). The Board also took into account the compliance environment at IICO and the Subadviser, noting the resources that each has dedicated towards compliance. The Board concluded that the nature and extent of the services provided by IICO and the Subadviser were appropriate, that the quality of those services had been consistent with quality norms in the industry and that the Funds were likely to benefit from the continued provision of those services.

#### Benefits from the Relationship with the Funds

The Board next discussed whether IICO or the Subadviser derives any other direct or indirect benefit from serving the Funds. In that regard, the Board discussed the transfer agency and shareholder servicing fees that Waddell & Reed Services Company ("WISC"), an affiliate of IICO, has provided the Funds. The Board took note of the caps that management previously had agreed to on shareholder servicing costs. The Board also considered the benefits that accrue to each service provider organization from its respective relationship with the Funds, including the fact that a variety of services are provided by affiliates of IICO, including distribution, administrative and Fund accounting services, and, as discussed above, shareholder servicing. The Board also considered management's proposal to outsource the transactional processing operations of WISC to a sub-agent for the Funds, which is designed to achieve greater efficiencies and savings for Fund shareholders over time. After full consideration of these and other factors, the Board concluded that none of IICO, the Subadviser or any of their affiliates receives any additional direct or indirect benefits that would preclude the Board from approving the continuation of the Management Agreement with IICO or the Investment Subadvisory Agreement with the Subadviser.

#### **Economies of Scale**

The Board discussed whether economies of scale are being realized by the Funds and whether fee levels reflect those economies of scale for the benefit of the Funds' shareholders. The Board considered the fact that as a Fund's assets have grown, the expenses of that Fund generally have fallen. Additionally, in that regard, the Board considered the various initiatives that IICO has undertaken to seek to rationalize the fund complex.

#### Performance of the Funds and Costs of Services Provided

The Board considered the performance of each Fund and the costs of the services provided, focusing in particular on a number of Funds that the independent fee consultant had identified. Specifically, the Board examined the investment performance of each Fund, including the percentile ranking of each Fund over various periods of time. The Board also examined the performance of each Fund against its respective benchmark index and peer funds for the same periods. After extensively reviewing all of the performance information provided, the Board concluded that the Funds' performance in each asset class was acceptable. Although the performance of some of the focus Funds identified by the independent fee consultant lagged that of their peers or respective benchmark index, the Board recognized that IICO, or the Subadviser, had taken, or was taking, steps to address that underperformance, and determined to continue to monitor closely the performance of those Funds.

The Board also considered the expenses and expense ratio of each Fund, and the expense limitation and fee reduction arrangements entered into by IICO in light of the services provided by IICO and the Subadviser. The Board also compared each Fund's expenses, including advisory, distribution and shareholder servicing fees, with the expenses and advisory fees of other investment advisers managing similarly situated funds, as well as the advisory fees that IICO (or an affiliate) charges for providing advisory services to other accounts in the same asset class for certain Funds. In that regard, the Board noted that IICO performs significant additional services for the Funds as compared to those other accounts. The Board also took into account the information on IICO's profitability in managing the Funds, including the methodology used to calculate profitability. The Board finally considered the amount of assets in each Fund, each Fund's average account size and how those factors affect the Funds' expense ratios, noting that, as the Funds' assets have increased or decreased over time, the expense ratios of the Funds generally have fallen or risen, respectively. After completing this examination, the Board concluded that each Fund's expenses are appropriate at the current time.

#### **Independent Fee Consultant Review**

Independent legal counsel, on behalf of the Independent Trustees, engaged an independent fee consultant to assist them in evaluating the reasonableness of the management fees charged by IICO to all funds within the fund complex. The independent fee consultant's review addressed the following fee-related factors:

- 1. The nature, extent and quality of IICO's services to the Funds;
- 2. Management fees and expenses in the context of performance;
- 3. Product category expenses, including peers;
- 4. Profit margins of IICO's parent from supplying such services;
- 5. Subadviser and institutional fee analyses; and
- 6. Possible economies of scale as a Fund grows larger.

The following summarizes the findings of the independent fee consultant retained by the Independent Trustees.

#### **Summary Findings**

The report stated that IICO delivered reasonable levels of performance in the longer-term periods and reasonable levels of service to the Funds in relation to its management fees as compared to the investment advisers of comparable funds. For the 36 months ended March 31, 2019, approximately 17% of the Funds were in the top quartile of performance and 29% of the Funds were in the top two quartiles of performance and that short-term performance of such Funds were showing signs of improvement. Specifically, the report noted that 58% of the Funds were in the top two quartiles in the one-year period, and that 28% of all such Funds had improving performance in their one-year period. The independent fee consultant noted that the Funds' performance appeared to be grounded in a number of institutional competitive advantages at IICO, including investment management depth, ability to attract top talent, proactive management, performance-focused culture, economic analysis and an effective trading infrastructure.

The report further indicated that total expenses of the funds in the complex, on average, were 3% over the average total expenses of their respective Broadridge Expense Group peers and 1% under the average total expenses for their Broadridge Expense Universe peers. The net management fees for the Funds were 2% over the average net management fees of their respective Broadridge Expense Group peers and 7% over the average net management fees for their Broadridge Expense Universes. The report also stated that, when compared to expenses from the prior year, net management fees deceased by 1.5%, while total expenses decreased by 1%.

The report also stated that the management fees IICO charges to the Funds are reasonable in relation to the management fees it charges to its institutional account clients. The report noted that these institutional account clients have different service and infrastructure needs and in addition, the average spread between management fees IICO charged to the Funds and those it charges to institutional account clients is reasonable relative to the average fee spreads computed from industry surveys.

The report stated that while it was difficult to confirm overall economies of scale, it was clear that the Funds' shareholders generally are benefitting from lower expenses as the Funds' assets grow.

The report also noted that the overall profitability of IICO's parent relative to other complexes is reasonable.

Finally, the report also examined the fees that IICO retains on Funds that are subadvised by unaffiliated subadvisers and indicated that those fees are reasonable relative to the industry. The report also stated that the subadvisory fees that IICO earns for serving as a subadviser to an unaffiliated fund when compared to fees of similar funds likewise are reasonable relative to the industry.

#### Conclusions

The independent fee consultant's report concluded that it believes that the services provided by IICO and its affiliates and expenses incurred by the Funds in the previous 12 months are reasonable and provide adequate justification for renewal of the Funds' existing Agreements.

(UNAUDITED)

Ivy Distributors, Inc., the Ivy Variable Insurance Portfolios and the InvestEd Portfolios ("Ivy") are committed to ensuring their clients have access to a broad range of products and services to help them achieve their personal financial goals. Accurate information lies at the heart of our pledge to provide these products and services, and we strive to protect your personal nonpublic information. In the course of doing business with Ivy, clients are requested to share financial information and they may be asked to provide other personal details. Clients can be assured that Ivy is diligent in its efforts to keep such information confidential.

## **Recognition of a Client's Expectation of Privacy**

At Ivy, we believe the confidentiality and protection of client information is one of our fundamental responsibilities. And while information is critical to providing quality service, we recognize that one of our most important assets is our clients' trust. Thus, the safekeeping of client information is a priority for Ivy.

#### Information Collected

In order to tailor available financial products to your specific needs, Ivy may request that you complete a variety of forms that require nonpublic personal information about your financial history and other personal details, including but not limited to, your name, address, social security number, assets, income and investments. Ivy may also gather information about your transactions with us, our affiliates and others.

## Categories of Information that may be Disclosed

While Ivy may disclose information it collects from applications and other forms, as described above, we at Ivy also want to assure all of our clients that whenever information is used, it is done with discretion. The safeguarding of client information is an issue we take seriously.

## Categories of Parties to whom we disclose nonpublic personal information

Ivy may disclose nonpublic personal information about you to selectively chosen financial service providers, whom we believe have valuable products or services that could benefit you. Whenever we do this, we carefully review the company and the product or service to make sure that it provides value to our clients. We share the minimum amount of information necessary for that company to offer its product or service. We may also share information with unaffiliated companies that assist us in providing our products and services to our clients; in the normal course of our business (for example, with consumer reporting agencies and government agencies); when legally required or permitted in connection with fraud investigations and litigation; and at the request or with the permission of a client.

In addition, Ivy has entered into a Protocol with a number of other brokerage firms intended to further our clients' freedom of choice in connection with the movement of their financial advisors to new firms. In the event your account is maintained through Ivy and your financial advisor leaves Ivy to join a firm that has likewise entered the Protocol, Ivy may disclose your name, address and telephone number to the departed advisor's new firm.

#### **Opt Out Right**

If you prefer that we not disclose nonpublic personal information about you to nonaffiliated third parties, you may opt out of those disclosures; that is, you may direct us not to make those disclosures (other than disclosures permitted by law). If you wish to opt out of disclosures to nonaffiliated third parties, you may make this request in writing to: Ivy, Attn: Opt Out Notices, P.O. Box 29220, Shawnee Mission, KS 66201, or you may call 1-888-923-3355 and a Client Services Representative will assist you.

#### **Confidentiality and Security**

We restrict access to nonpublic personal information about you to those employees who need to know that information to provide products and services to you. We maintain physical, electronic, and procedural safeguards that comply with federal standards to guard your nonpublic personal information. If you decide to close your account(s) or become an inactive client, we will adhere to the privacy policies and practices as described in this notice.

(UNAUDITED)

## **Proxy Voting Guidelines**

A description of the policies and procedures Ivy Variable Insurance Portfolios uses to determine how to vote proxies relating to portfolio securities is available (i) without charge, upon request, by calling 1.888.923.3355 and (ii) on the Securities and Exchange Commission's ("SEC") website at www.sec.gov.

## **Proxy Voting Records**

Information regarding how the Portfolio voted proxies relating to portfolio securities during the most recent 12-month period ended June 30 is available on Form N-PX at www.ivyinvestments.com and on the SEC's website at www.sec.gov.

# QUARTERLY PORTFOLIO SCHEDULE INFORMATION



(UNAUDITED)

Portfolio holdings can be found on the Trust's website at www.ivyinvestments.com. Alternatively, a complete schedule of portfolio holdings of each Portfolio for the first and third quarters of each fiscal year is filed with the SEC and can be found on the Trust's Form N-Q and/or Form NPORT-EX. These holdings may be viewed in the following ways:

- · On the SEC's website at www.sec.gov.
- For review and copy at the SEC's Public Reference Room in Washington, DC. Information on the operations of the Public Reference Room may be obtained by calling 1.800.SEC.0330.

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# THE IVY VARIABLE INSURANCE PORTFOLIOS FAMILY

#### Global/International Portfolios

Global Equity Income

Global Growth

International Core Equity

## **Domestic Equity Portfolios**

Core Equity

Growth

Mid Cap Growth Small Cap Core

Small Cap Growth

Value

#### **Fixed Income Portfolios**

Corporate Bond

Global Bond

High Income

Limited-Term Bond

## **Money Market Portfolio**

Government Money Market

## **Specialty Portfolios**

Asset Strategy

Balanced

Energy

Natural Resources

Pathfinder Aggressive

Pathfinder Conservative

Pathfinder Moderate

Pathfinder Moderately Aggressive

Pathfinder Moderately Conservative

Pathfinder Moderate — Managed Volatility

Pathfinder Moderately Aggressive — Managed Volatility

Pathfinder Moderately Conservative — Managed Volatility

Science and Technology

Securian Real Estate Securities

The underlying portfolios discussed in this report are only available as investment options in variable annuity and variable life insurance contracts issued by life insurance companies. They are not offered or made available directly to the general public.

This report is submitted for the general information of the shareholders of Ivy Variable Insurance Portfolios. It is not authorized for distribution to prospective investors in a Portfolio unless accompanied with or preceded by the current Portfolio prospectus as well as the variable product prospectus.

ANN-VIP1 (12/19)