

# Episcopal Foundation of Dallas

November 2021

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# Agenda

- I. Financial Market Review
- II. Portfolio Performance
- III. Fees and Expenses
- IV. Economic and Market Outlook

**Presented by:**

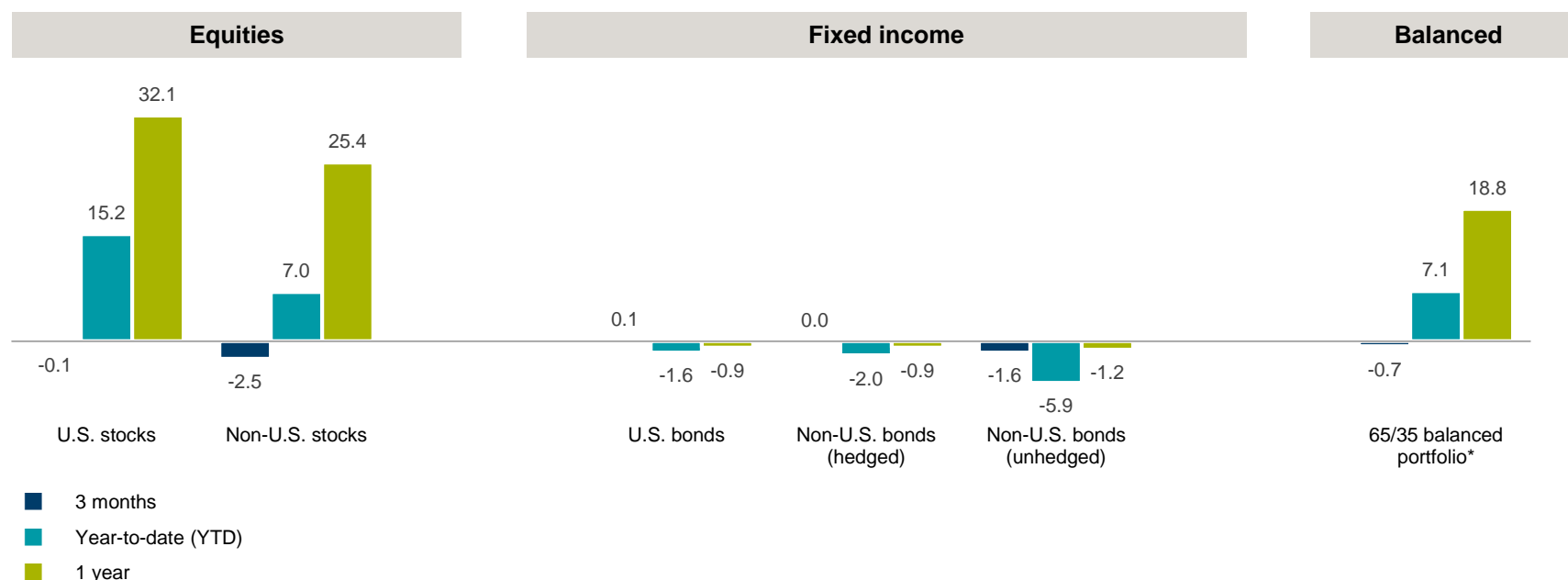
Geoffrey Hall, CFA, CAIA  
Senior Investment Consultant  
Vanguard Institutional Advisory Services®

# Financial Market Review

## Stocks stumble as financial conditions seem to be tightening amid debt ceiling worries

- S&P 500 Drops 4.65% in September, its first monthly loss since January and biggest one-month drop since the start of the pandemic
- U.S. consumer confidence declined for the third straight month in September as the rapidly-spreading delta variant of the coronavirus extends the life of a global pandemic. Concerns about inflation are also dampening consumer sentiment.
- Debt ceiling drama in Congress continued and Yellen warned that the Treasury will exhaust all of its “extraordinary measures” to avoid default obligations by Oct 18.
- The Federal Reserve has argued that inflation is transitory and will recede to just above its 2% target by 2022. However, Fed Chairman Jerome Powell, asked last week whether inflation is now broader and more structural than earlier this year, responded, “Yes, I think it’s fair to say that it is.”

### Global market returns as of September 30, 2021 (%)



**Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Sources: Bloomberg Barclays, CRSP, and FTSE.

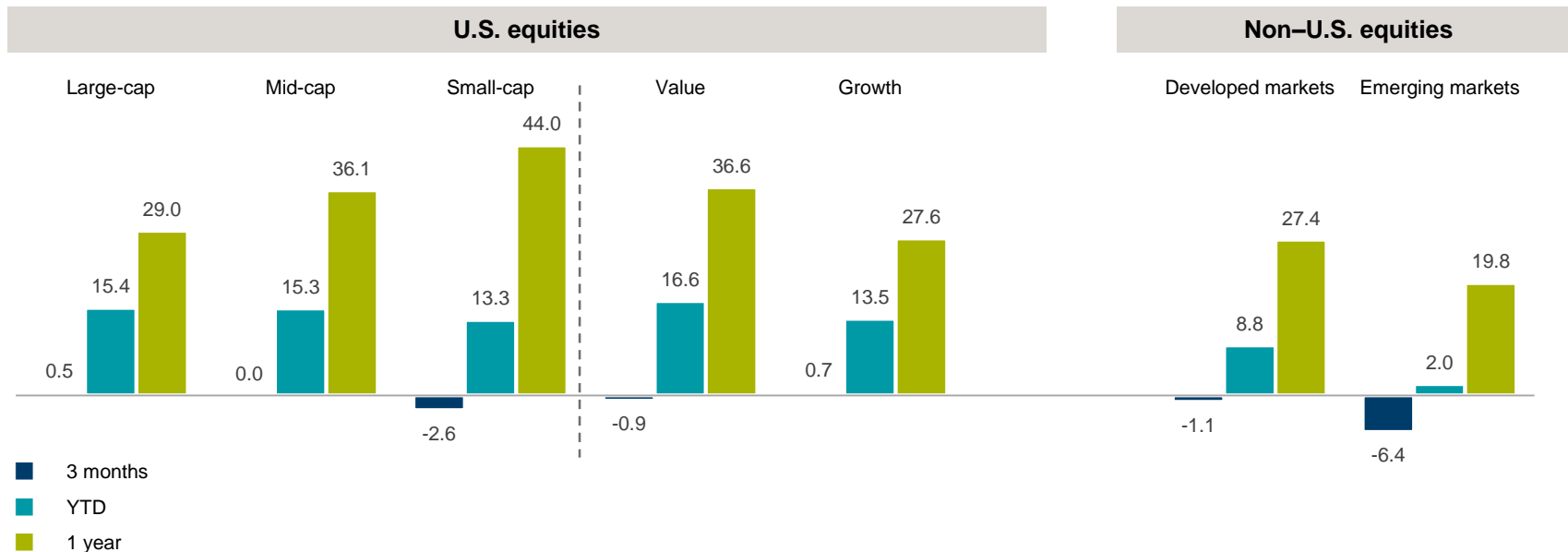
U.S. stocks (CRSP U.S. Total Market Index), non-U.S. stocks (FTSE Global All-Cap ex-U.S. Index), U.S. bonds (Bloomberg Barclays U.S. Aggregate Float Adj.U.S. Index), non-U.S. bonds hedged (Bloomberg Barclays Global Aggregate ex-U.S.D Float Adj.U.S. Index), non-U.S. bonds unhedged (Bloomberg Barclays Global Aggregate Index ex USD).

\* 65/35 balanced portfolio Static Composite (39% U.S. stocks, 26% international stocks, and 24.5% investment-grade U.S. bonds, 10.5% investment-grade international bonds).

## China drags on emerging markets – Evergrande and regulatory changes play a role

- Growth and value – while markets tumbled in September, value held up better than growth: *S&P 500* -4.65, *S&P Value* -3.29, *S&P Growth* -5.79
- Some economists fear that Evergrande's potential collapse arrived as Beijing imposed restrictions and rule changes on a wide range of companies in recent months. China urged tech firms, education providers, food delivery services, and more to reform their business practices, with the consistent theme of the state asserting control over the corporate sector.
- Worries escalated when Evergrande missed interest payments on a dollar-denominated bond. In an effort to reduce systemic risk, the People's Bank of China injected significant levels of liquidity into the banking system via its open-market operations.

### Global equity market returns as of September 30, 2021 (%)



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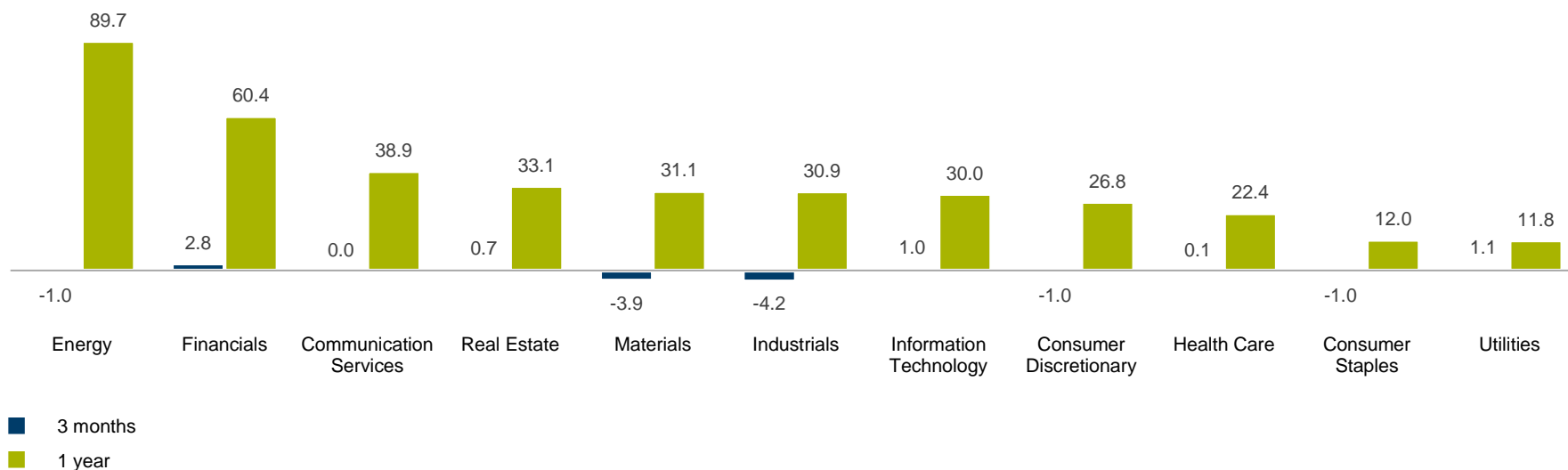
Sources: CRSP, FTSE, and Russell.

Large-cap (CRSP U.S. Mega Cap Index), mid-cap (CRSP U.S. Mid Cap Index), small-cap (CRSP U.S. Small Cap Index); value (Russell 3000 Value Index), growth (Russell 3000 Growth Index); developed markets (FTSE Developed All Cap ex-U.S. Index), emerging markets (FTSE Emerging Markets All Cap China A Inclusion Index).

## Shortages hit natural resources and energy

- Inflation forced homebuilders to take it slow. Rising costs and shortages of building materials and labor rippled across the homebuilding industry. As building a new home got more expensive, some of those costs were passed along to buyers. Home prices surged 19.7% in July, posting the biggest jump in more than 30 years.
- Countries, such as Japan, England, France, India and China energy crisis lingered - spanning gas, electricity, propane, coal, and oil. As high prices on these commodities persist, consumers around the globe will feel the financial impact as the northern hemisphere moves into colder weather.
- Petrochemicals, made from oil and utilized in products like paint, cereal bags, medical devices and bicycle helmets, have been shaken by the pandemic. Yet, they have also run into other problems, one after another: A winter freeze in Texas. A lightning strike in Louisiana. Hurricanes along the Gulf Coast - all disrupting production and contributing to rising prices.

### U.S. equity sector returns as of September 30, 2021 (%)



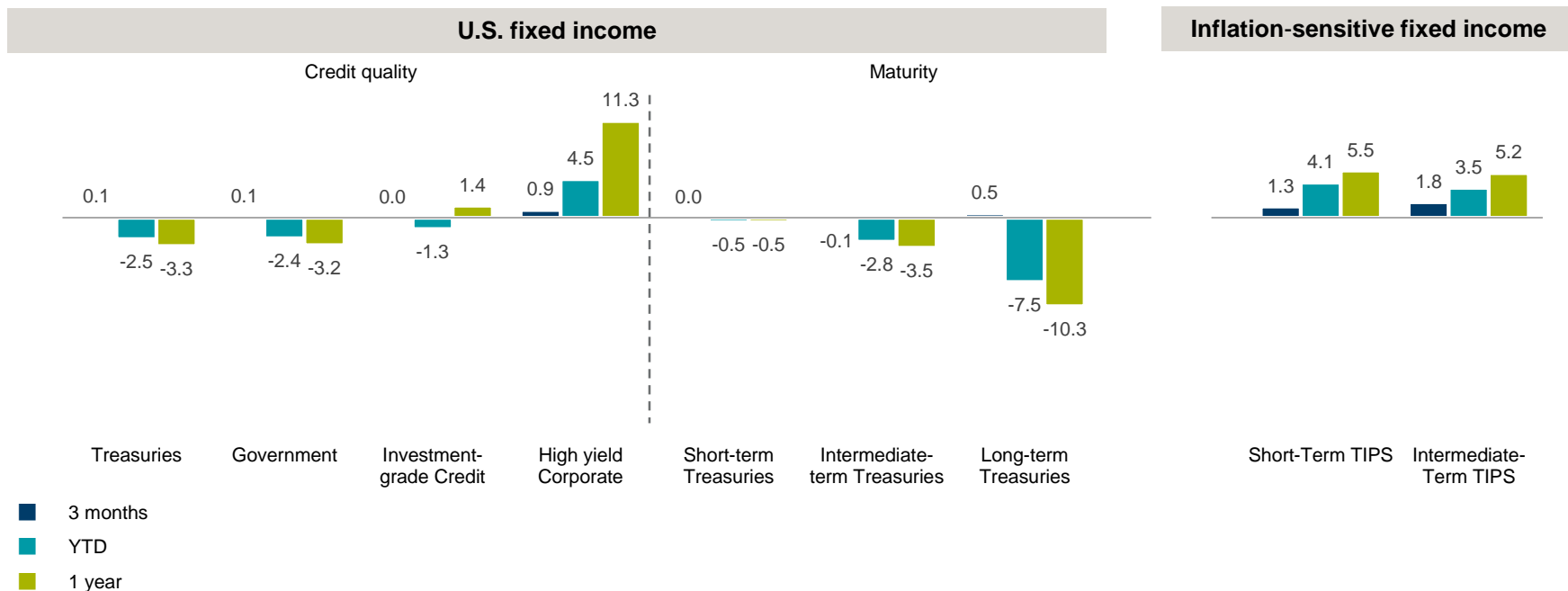
Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.

Source: FactSet.  
U.S. markets measured by CRSP U.S. Total Market Index.

# The Dollar reaches its highest level since November, tracking the rise in Treasury yields

- Ten- and 30-year U.S. Treasury yields posted their biggest quarterly rises since March as investors' concerns about inflation intensified and global central banks begin moving away from easy monetary policy settings.
- Short-term TIPS continued to perform as expected as a result of inflation concerns.
- Fed chairman Jerome Powell stated that tapering of its bond-purchasing program would start in the next month or two and likely be concluded by the middle of next year if the economy remained on its current trajectory. Half of the Fed's policy committee members favored an increase in interest rates as soon as next year.

## Domestic fixed income market returns as of September 30, 2021 (%)



**Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Source: Bloomberg Barclays.

Treasuries, government, investment-grade credit; high-yield (Bloomberg Barclays U.S. Treasury/Government/Credit/Corporate High-Yield Indices); short-inter-long-term Treasuries (Bloomberg Barclays U.S. 1-5/5-10/Long Treasury Indices); short-term TIPS (Bloomberg Barclays U.S. Treasury 0-5 Year Inflation-Protected Index); intermediate-term TIPS (Bloomberg Barclays U.S. Treasury Inflation-Protected Index).

# Headwinds for active equity mutual fund managers

## Percentage of actively managed funds underperforming their style benchmarks\*

Ten-year: June 30, 2021

	Value	Blend	Growth
Large	94%	97%	91%
Mid	95%	95%	71%
Small	93%	96%	72%

## International

69%	75%	61%
Emerging	Developed	Global

## Key

≥ 75%	≥ 50%	< 50%	≥25%	< 25%
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## Vanguard active equity funds versus their primary and peer group benchmarks\*\*

Ten-year: June 30, 2021

	Below benchmark	Above benchmark
Above peer group average	24%	59%
Below peer group average	8%	8%

The competitive performance data shown represent past performance, which is not a guarantee of future results, and all investments are subject to risks. For the most recent Vanguard fund performance, visit our website at [www.vanguard.com/performance](http://www.vanguard.com/performance).

Note: Performance data reflect periods ending June 30, 2021. Sources: Vanguard calculations, using data from ViFi and Morningstar.

\* Style benchmarks are represented by the following indexes—large blend: MSCI US Prime Market 750 Index through January 30, 2013, CRSP US Large Cap Index thereafter; large growth: MSCI US Prime Market Growth Index through April 16, 2013, CRSP US Large Cap Growth Index thereafter; large value: MSCI US Prime Market Value Index through April 16, 2013, CRSP US Large Cap Value Index thereafter; mid blend: MSCI US Mid Cap 450 Index through January 30, 2013, CRSP US Mid Cap Index thereafter; mid growth: MSCI US Mid Cap Growth Index through April 16, 2013, CRSP US Mid Cap Growth Index thereafter; mid value: MSCI US Mid Cap Value Index through April 16, 2013, CRSP US Mid Cap Value Index thereafter; small blend: MSCI US Small Cap 1750 Index through January 30, 2013, CRSP US Small Cap Index thereafter; small growth: MSCI US Small Cap Growth Index through April 16, 2013, CRSP US Small Cap Growth Index thereafter; small value: MSCI US Small Cap Value Index through April 16, 2013, CRSP US Small Cap Value Index thereafter.

International and global benchmarks are represented by the following indexes—Emerging: MSCI Emerging Markets Index; Developed: MSCI World Index; Global: MSCI All Country World Index.

\*\* Performance measured relative to each Vanguard fund's respective primary benchmark and current Lipper category average.



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## About the Vanguard Capital Markets Model

All investing is subject to risk, including the possible loss of the money you invest. Diversification does not ensure a profit or protect against a loss in a declining market. There is no guarantee that any particular asset allocation or mix of funds will meet your investment objectives or provide you with a given level of income.

International investing is subject to additional risks, including the possibility that returns will be hurt by a decline in the value of foreign currencies or by unfavorable developments in a particular country or region. Stocks and bonds of issuers based in emerging markets are subject to national and regional political and economic risks and to the risk of currency fluctuations. These risks are especially high in emerging markets.

Bond funds are subject to the risk that an issuer will fail to make payments on time, and that bond prices will decline because of rising interest rates or negative perceptions of an issuer's ability to make payments.

### About the Vanguard Capital Markets Model:

**IMPORTANT: The projections and other information generated by the Vanguard Capital Markets Model regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. VCMM results will vary with each use and over time.**

The VCMM projections are based on a statistical analysis of historical data. Future returns may behave differently from the historical patterns captured in the VCMM. More important, the VCMM may be underestimating extreme negative scenarios unobserved in the historical period on which the model estimation is based.

The Vanguard Capital Markets Model® is a proprietary financial simulation tool developed and maintained by Vanguard's Investment Strategy Group. The model forecasts distributions of future returns for a wide array of broad asset classes. Those asset classes include U.S. and international equity markets, several maturities of the U.S. Treasury and corporate fixed income markets, international fixed income markets, U.S. money markets, commodities, and certain alternative investment strategies. The theoretical and empirical foundation for the Vanguard Capital Markets Model is that the returns of various asset classes reflect the compensation investors require for bearing different types of systematic risk (beta). At the core of the model are estimates of the dynamic statistical relationship between risk factors and asset returns, obtained from statistical analysis based on available monthly financial and economic data. Using a system of estimated equations, the model then applies a Monte Carlo simulation method to project the estimated interrelationships among risk factors and asset classes as well as uncertainty and randomness over time. The model generates a large set of simulated outcomes for each asset class over several time horizons. Forecasts are obtained by computing measures of central tendency in these simulations. Results produced by the tool will vary with each use and over time.

The primary value of the VCMM is in its application to analyzing potential client portfolios. VCMM asset-class forecasts—comprising distributions of expected returns, volatilities, and correlations—are key to the evaluation of potential downside risks, various risk–return trade-offs, and the diversification benefits of various asset classes. Although central tendencies are generated in any return distribution, Vanguard stresses that focusing on the full range of potential outcomes for the assets considered, such as the data presented in this paper, is the most effective way to use VCMM output.

The VCMM seeks to represent the uncertainty in the forecast by generating a wide range of potential outcomes. It is important to recognize that the VCMM does not impose “normality” on the return distributions, but rather is influenced by the so-called fat tails and skewness in the empirical distribution of modeled asset-class returns. Within the range of outcomes, individual experiences can be quite different, underscoring the varied nature of potential future paths. Indeed, this is a key reason why we approach asset-return outlooks in a distributional framework.

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# Portfolio Performance

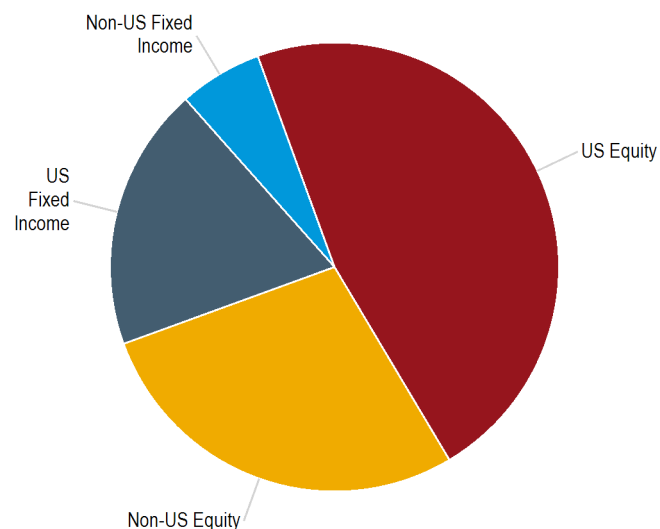
## Total Portfolio Performance & Asset Allocation

Performance Summary ending September 30, 2021

	Market Value (\$)	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>EPISCOPAL FOUNDATION OF DALLAS</b>	<b>42,783,888</b>	<b>-3.29</b>	<b>-1.41</b>	<b>8.65</b>	<b>23.20</b>	<b>11.48</b>	<b>11.38</b>	<b>--</b>	<b>9.80</b>	<b>Jun-15</b>
<b>EPISCOPAL FOUNDATION OF DALLAS (Net)</b>		<b>-3.29</b>	<b>-1.44</b>	<b>8.57</b>	<b>23.08</b>	<b>11.37</b>	<b>11.26</b>	<b>--</b>	<b>9.69</b>	
Composite Benchmark		-3.22	-0.70	8.78	21.51	11.31	10.96	--	9.55	Jun-15

- Composite Benchmark = 47% Spliced Total Stock Market Index / 28% Spliced Total International Stock Index / 19% Spliced Bloomberg Barclays US Aggregate Float Adjusted Index / 6% Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged

Current Allocation as of September 30, 2021



	Current \$	Current %	Policy	Difference*
US Equity	\$20,119,093	47.0%	47.0%	0.0%
Non-US Equity	\$11,964,242	28.0%	28.0%	0.0%
US Fixed Income	\$8,132,314	19.0%	19.0%	0.0%
Non-US Fixed Income	\$2,568,240	6.0%	6.0%	0.0%
<b>Total</b>	<b>\$42,783,888</b>	<b>100.0%</b>	<b>100.0%</b>	

\*Difference between Policy and Current Allocation

Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any other security-level expenses.

Net of Fee returns reflect the deduction of fund expense ratios, any purchase or redemption fees, and VIAS advisory fee applied to the client portfolio.

Returns greater than one year represent annualized returns. Returns less than one year represent cumulative returns.

## Performance Summary (Gross of Advisory Fees) ending September 30, 2021

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>EPISCOPAL FOUNDATION OF DALLAS</b>	<b>42,783,888</b>	<b>100.00</b>	<b>-3.29</b>	<b>-1.41</b>	<b>8.65</b>	<b>23.20</b>	<b>11.48</b>	<b>11.38</b>	<b>--</b>	<b>9.80</b>	<b>Jun-15</b>
<b>EPISCOPAL FOUNDATION OF DALLAS (Net)</b>			<b>-3.29</b>	<b>-1.44</b>	<b>8.57</b>	<b>23.08</b>	<b>11.37</b>	<b>11.26</b>	<b>--</b>	<b>9.69</b>	
Composite Benchmark			-3.22	-0.70	8.78	21.51	11.31	10.96	--	9.55	Jun-15
<b>Total Equity</b>	<b>32,083,335</b>	<b>74.99</b>	<b>-4.09</b>	<b>-1.90</b>	<b>11.74</b>	<b>31.79</b>	<b>13.40</b>	<b>14.42</b>	<b>--</b>	<b>11.78</b>	<b>Jun-15</b>
<b>Equity Domestic</b>	<b>20,119,093</b>	<b>47.02</b>	<b>-4.20</b>	<b>-1.02</b>	<b>15.87</b>	<b>35.15</b>	<b>14.56</b>	<b>16.13</b>	<b>--</b>	<b>13.72</b>	<b>Jun-15</b>
Spliced Total Stock Market Index			-4.48	-0.06	15.18	32.10	16.06	16.88	16.62	14.47	Jun-15
<b>Equity International</b>	<b>11,964,242</b>	<b>27.96</b>	<b>-3.90</b>	<b>-3.42</b>	<b>5.25</b>	<b>26.20</b>	<b>11.47</b>	<b>11.69</b>	<b>--</b>	<b>8.77</b>	<b>Jun-15</b>
Spliced Total International Stock Index			-3.12	-2.50	6.95	25.36	8.53	9.25	7.89	6.79	Jun-15
<b>Total Fixed Income</b>	<b>10,700,554</b>	<b>25.01</b>	<b>-0.85</b>	<b>0.09</b>	<b>-1.23</b>	<b>-0.14</b>	<b>5.20</b>	<b>3.15</b>	<b>--</b>	<b>3.60</b>	<b>Jun-15</b>
<b>Fixed Income Domestic</b>	<b>8,132,314</b>	<b>19.01</b>	<b>-0.79</b>	<b>0.11</b>	<b>-0.99</b>	<b>0.13</b>	<b>5.60</b>	<b>3.31</b>	<b>--</b>	<b>3.62</b>	<b>Jun-15</b>
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			-0.91	0.05	-1.62	-0.93	5.44	2.99	3.05	3.43	Jun-15
<b>Fixed Income International</b>	<b>2,568,240</b>	<b>6.00</b>	<b>-1.02</b>	<b>0.06</b>	<b>-2.01</b>	<b>-1.00</b>	<b>4.01</b>	<b>2.66</b>	<b>--</b>	<b>3.52</b>	<b>Jun-15</b>
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			-1.14	-0.01	-1.98	-0.92	4.17	2.85	--	3.73	Jun-15

Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any other security-level expenses.

Net of Fee returns reflect the deduction of fund expense ratios, any purchase or redemption fees, and VIAS advisory fee applied to the client portfolio.

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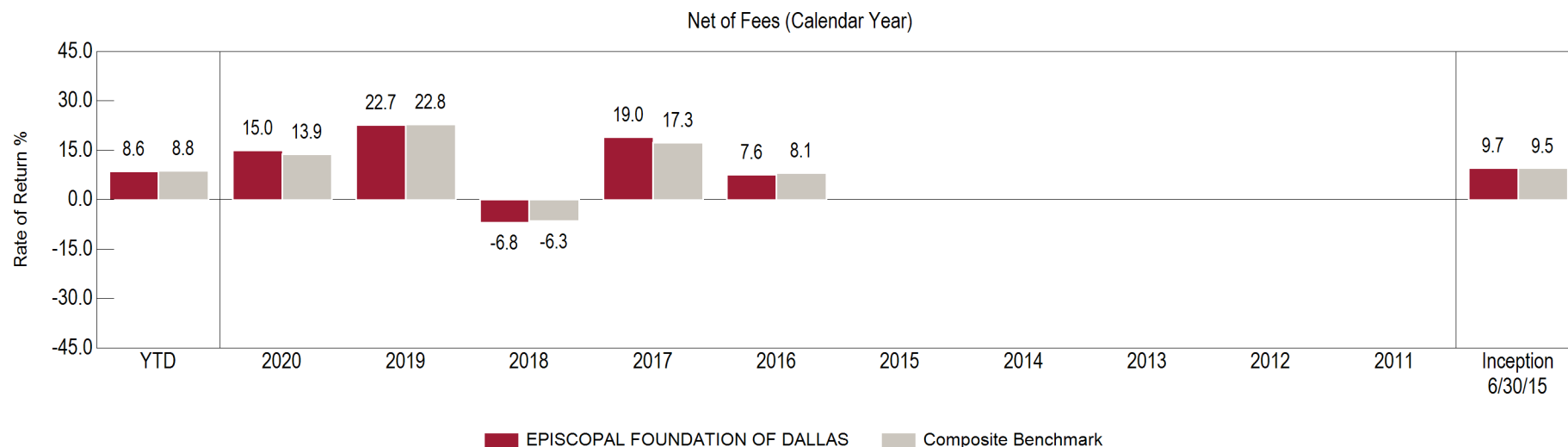
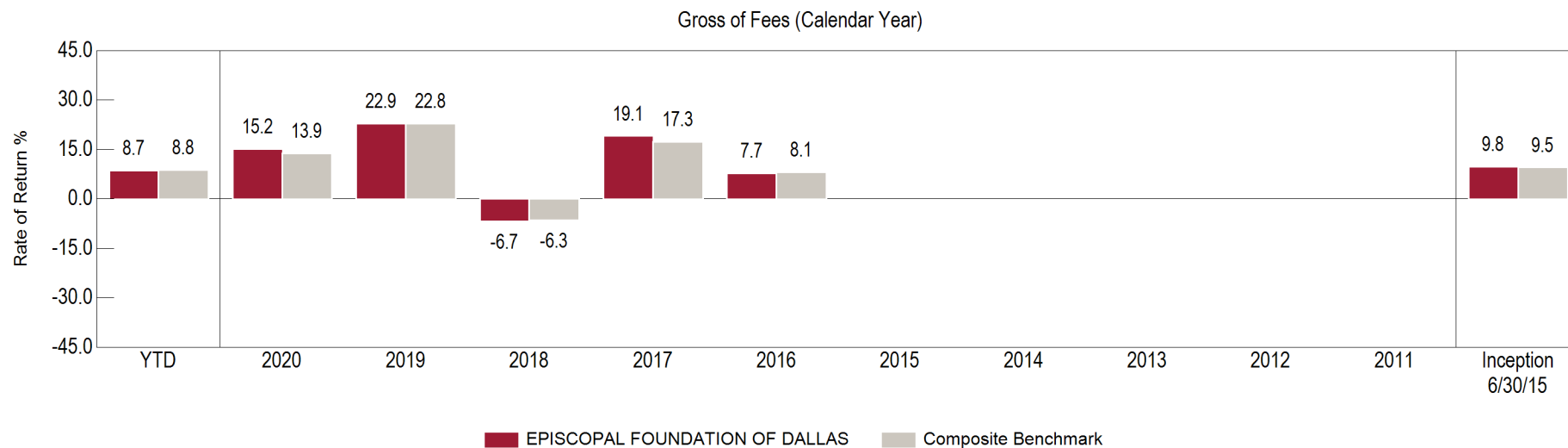
## Performance Summary (Gross of Advisory Fees) ending September 30, 2021

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>EPISCOPAL FOUNDATION OF DALLAS</b>	<b>42,783,888</b>	<b>100.00</b>	<b>-3.29</b>	<b>-1.41</b>	<b>8.65</b>	<b>23.20</b>	<b>11.48</b>	<b>11.38</b>	<b>--</b>	<b>9.80</b>	<b>Jun-15</b>
Composite Benchmark			-3.22	-0.70	8.78	21.51	11.31	10.96	--	9.55	Jun-15
<b>Total Equity</b>	<b>32,083,335</b>	<b>74.99</b>	<b>-4.09</b>	<b>-1.90</b>	<b>11.74</b>	<b>31.79</b>	<b>13.40</b>	<b>14.42</b>	<b>--</b>	<b>11.78</b>	<b>Jun-15</b>
<b>Equity Domestic</b>	<b>20,119,093</b>	<b>47.02</b>	<b>-4.20</b>	<b>-1.02</b>	<b>15.87</b>	<b>35.15</b>	<b>14.56</b>	<b>16.13</b>	<b>--</b>	<b>13.72</b>	<b>Jun-15</b>
Spliced Total Stock Market Index			-4.48	-0.06	15.18	32.10	16.06	16.88	16.62	14.47	Jun-15
Vanguard® Total Stock Market Index Fund Institutional Shares	11,101,411	25.95	-4.48	-0.06	15.18	32.10	16.06	16.88	16.61	14.46	Jun-15
Spliced Total Stock Market Index			-4.48	-0.06	15.18	32.10	16.06	16.88	16.62	14.47	Jun-15
Multi-Cap Core Funds Average			-4.64	-0.48	14.35	30.58	13.30	14.09	13.95	11.47	Jun-15
Vanguard® Windsor™ Fund Admiral™ Shares	4,543,793	10.62	-2.86	-0.97	18.55	45.90	12.23	13.12	14.61	10.28	Jun-15
Russell 1000 Value			-3.48	-0.78	16.14	35.01	10.07	10.94	13.51	9.75	Jun-15
Multi-Cap Value Funds Average			-3.42	-1.19	17.39	38.26	8.54	10.34	12.27	8.62	Jun-15
Vanguard® PRIMECAP Fund Admiral™ Shares	4,473,889	10.46	-4.84	-3.44	13.70	29.83	13.44	17.32	17.97	15.38	Jun-15
Russell 1000 Growth			-5.60	1.16	14.30	27.32	22.00	22.84	19.68	19.30	Jun-15
Multi-Cap Growth Funds Average			-5.06	-0.29	10.81	26.98	19.64	20.23	17.22	16.06	Jun-15
<b>Equity International</b>	<b>11,964,242</b>	<b>27.96</b>	<b>-3.90</b>	<b>-3.42</b>	<b>5.25</b>	<b>26.20</b>	<b>11.47</b>	<b>11.69</b>	<b>--</b>	<b>8.77</b>	<b>Jun-15</b>
Spliced Total International Stock Index			-3.12	-2.50	6.95	25.36	8.53	9.25	7.89	6.79	Jun-15
Vanguard® Total International Stock Index Fund Inst Shares	6,006,519	14.04	-3.42	-3.00	6.42	24.40	8.34	9.05	7.92	6.64	Jun-15
Spliced Total International Stock Index			-3.12	-2.50	6.95	25.36	8.53	9.25	7.89	6.79	Jun-15
International Funds Average			-3.80	-1.82	7.13	24.10	8.54	9.00	8.12	6.48	Jun-15
Vanguard® International Value Fund	3,029,046	7.08	-3.09	-3.66	5.91	30.88	6.94	8.49	7.89	5.64	Jun-15
Spliced International Index			-3.20	-2.99	5.90	23.92	8.03	8.94	7.48	6.39	Jun-15
International Funds Average			-3.80	-1.82	7.13	24.10	8.54	9.00	8.12	6.48	Jun-15
Vanguard® International Growth Fund Admiral™ Shares	2,928,677	6.85	-5.68	-4.05	2.08	24.80	22.26	20.15	14.95	16.13	Jun-15
Spliced International Index			-3.20	-2.99	5.90	23.92	8.03	8.94	7.48	6.39	Jun-15
International Funds Average			-3.80	-1.82	7.13	24.10	8.54	9.00	8.12	6.48	Jun-15

## Performance Summary (Gross of Advisory Fees) ending September 30, 2021

	Market Value (\$)	% of Portfolio	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fixed Income</b>	<b>10,700,554</b>	<b>25.01</b>	<b>-0.85</b>	<b>0.09</b>	<b>-1.23</b>	<b>-0.14</b>	<b>5.20</b>	<b>3.15</b>	<b>--</b>	<b>3.60</b>	<b>Jun-15</b>
<b>Fixed Income Domestic</b>	<b>8,132,314</b>	<b>19.01</b>	<b>-0.79</b>	<b>0.11</b>	<b>-0.99</b>	<b>0.13</b>	<b>5.60</b>	<b>3.31</b>	<b>--</b>	<b>3.62</b>	<b>Jun-15</b>
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			-0.91	0.05	-1.62	-0.93	5.44	2.99	3.05	3.43	Jun-15
Vanguard® Total Bond Market Index Fund Admiral™ Shares	4,270,823	9.98	-0.90	0.11	-1.58	-0.92	5.41	2.93	2.96	3.38	Jun-15
Spliced Bloomberg Barclays US Aggregate Float Adjusted Index			-0.91	0.05	-1.62	-0.93	5.44	2.99	3.05	3.43	Jun-15
Spliced Intermediate-Term Investment-Grade Debt Funds Average			-0.81	0.01	-1.11	0.33	5.49	3.09	3.26	3.39	Jun-15
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	2,567,861	6.00	-0.88	0.08	-0.75	1.13	6.98	4.04	4.44	4.52	Jun-15
Bloomberg US Credit 5-10 Yr TR			-0.94	0.02	-1.20	1.05	7.38	4.37	4.93	4.92	Jun-15
Spliced Core Bond Funds Average			-0.81	0.01	-1.11	0.33	5.49	3.09	3.26	3.39	Jun-15
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	1,293,629	3.02	-0.22	0.14	0.35	1.34	4.02	2.71	2.64	2.78	Jun-15
Bloomberg US Credit 1-5 Yr TR			-0.21	0.09	0.13	1.08	4.25	2.85	2.79	2.85	Jun-15
1-5 Year Investment-Grade Debt Funds Average			-0.11	0.11	0.37	1.44	3.19	2.23	1.98	2.14	Jun-15
<b>Fixed Income International</b>	<b>2,568,240</b>	<b>6.00</b>	<b>-1.02</b>	<b>0.06</b>	<b>-2.01</b>	<b>-1.00</b>	<b>4.01</b>	<b>2.66</b>	<b>--</b>	<b>3.52</b>	<b>Jun-15</b>
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			-1.14	-0.01	-1.98	-0.92	4.17	2.85	--	3.73	Jun-15
Vanguard® Total International Bond Index Fund Adm™ Shares	2,568,240	6.00	-1.02	0.06	-2.01	-1.00	4.01	2.66	--	3.52	Jun-15
Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Hedged			-1.14	-0.01	-1.98	-0.92	4.17	2.85	--	3.73	Jun-15
International Income Funds Average			-1.84	-1.34	-4.24	-0.11	2.77	1.70	1.58	2.36	Jun-15

## Total Portfolio Performance



Gross of Advisory Fee returns reflect the deduction of fund expense ratios and any other security-level expenses.

Net of Fee returns reflect the deduction of fund expense ratios, any purchase or redemption fees, and VIAS advisory fee applied to the client portfolio.

Returns greater than one year represent annualized returns. Returns less than one year represent cumulative returns.

## Cash Flow Summary

	Last Month	Last Three Months	Year-To-Date	One Year
Beginning Market Value	\$44,298,353	\$46,275,685	\$43,876,936	\$39,253,650
Net Cash Flow	-\$35,300	-\$2,880,830	-\$4,832,720	-\$5,456,741
Capital Appreciation	-\$1,563,299	-\$725,916	\$3,355,453	\$8,257,575
Income	\$84,134	\$114,948	\$384,219	\$729,404
Ending Market Value	\$42,783,888	\$42,783,888	\$42,783,888	\$42,783,888

	Month Ending September 30, 2021				
	Beginning Market Value	Net Cash Flow	Capital Appreciation	Income	Ending Market Value
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	\$2,613,639	-\$23,417	-\$27,412	\$5,052	\$2,567,861
Vanguard® International Growth Fund Admiral™ Shares	\$3,153,757	-\$49,621	-\$175,459	\$0	\$2,928,677
Vanguard® International Value Fund	\$3,061,374	\$65,673	-\$98,001	\$0	\$3,029,046
Vanguard® PRIMECAP Fund Admiral™ Shares	\$4,670,977	\$34,621	-\$231,709	\$0	\$4,473,889
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	\$1,298,655	-\$2,223	-\$4,668	\$1,864	\$1,293,629
Vanguard® Total Bond Market Index Fund Admiral™ Shares	\$4,358,996	-\$50,418	-\$44,335	\$6,580	\$4,270,823
Vanguard® Total International Bond Index Fund Adm™ Shares	\$2,607,444	-\$12,838	-\$27,955	\$1,589	\$2,568,240
Vanguard® Total International Stock Index Fund Inst Shares	\$6,208,074	\$13,296	-\$247,815	\$32,963	\$6,006,519
Vanguard® Total Stock Market Index Fund Institutional Shares	\$11,651,448	-\$18,826	-\$567,298	\$36,086	\$11,101,411
Vanguard® Windsor™ Fund Admiral™ Shares	\$4,673,987	\$8,453	-\$138,647	\$0	\$4,543,793
<b>Total</b>	<b>\$44,298,353</b>	<b>-\$35,300</b>	<b>-\$1,563,299</b>	<b>\$84,134</b>	<b>\$42,783,888</b>



Episcopal Foundation of Dallas - Aggregated Performance Summary								
as-of September 30, 2021								
	Market Value*	Portfolio Allocation	Three-Month	Year-to-Date	One-Year	Three-Year	Five-Year	Since Inception
Vanguard	\$42,783,888	100.00%	-1.44%	8.57%	23.08%	11.37%	11.26%	9.69%
Vanguard Composite Benchmark			-0.70%	8.78%	21.51%	11.31%	10.96%	9.55%
Aggregate Portfolio (net of EFD fee)*	\$42,783,888	100.00%	-1.58%	8.12%	22.41%	10.77%	10.69%	8.96%
Aggregate Composite Benchmark*			-0.70%	8.78%	21.51%	11.31%	10.96%	9.71%
<p>Notes: Return data achieved before February 2016 provided by client. All returns are net of fund-level fees and the Vanguard advisory fee. Aggregate portfolio returns are net of the EFD administrative fee. Vanguard Composite provides a comparison for Vanguard portfolio return and constitutes 42% Spliced Total Stock Market Index/28% Spliced Total International Stock Index/18% Spliced Barclays U.S. Agg Flt-Adj. Index/6% Barclays GA ex-USD Flt-Adj. RIC Capped Index Hedged/6% REIT Spliced Index and has been calculated as-of September 30, 2021. Performance effective date for Vanguard Composite as-of December 31, 2015. Aggregate Composite provides a comparison for Episcopal Foundation of Dallas portfolio and constitutes a weighted average of the Vanguard Composite and HFRI Fund of Funds Composite. Since inception date is January 1, 2010.</p> <p>*Aggregate portfolio performance and Aggregate composite performance include hedge fund and HFRI performance, respectively, through February 29, 2016 for the Five-Year and Since Inception time periods.</p>								

# Fees and Expenses

# VIAS management fee structure

VIAS charges a management fee based on assets under management

## Annual fee schedule

Asset level	Management fee
First \$10 million	0.15%
Next \$10 million	0.12%
Next \$30 million	0.08%

## Total estimated expenses

Assets under management	Fee %	\$42.8 million
Management fee	0.105%	\$45,227
Fund expenses*	0.140%	\$59,897
Commingled funds/partnership expense	0.00%	\$0
Incentive fees	0.00%	\$0
Custodial fees	0.00%	\$0
Additional travel fees	0.00%	\$0
<b>Total all-in fee</b>	<b>0.245%</b>	<b>\$105,124</b>

\* These costs are estimated. Actual weighted annual expense ratio is determined by the actual funds chosen for the portfolio. Importantly, there are no sales commissions or 12b-1 fees for Vanguard funds. The cost of our investment management services (i.e., custodial fees, manager costs, trading costs) are reflected in the expense ratios of our funds and are deducted from each fund's earnings before they are distributed to shareholders. Vanguard is committed to maintaining operating expenses at the lowest possible level, without sacrificing premier quality service.

## Investment Expense Analysis as of September 30, 2021

Name	Market Value	% of Portfolio	Expense Ratio
<b>Total Equity</b>	<b>\$32,083,335</b>	<b>75.0%</b>	
<b>Equity Domestic</b>	<b>\$20,119,093</b>	<b>47.0%</b>	
Vanguard® Total Stock Market Index Fund Institutional Shares	\$11,101,411	25.9%	0.030%
Vanguard® Windsor™ Fund Admiral™ Shares	\$4,543,793	10.6%	0.190%
Vanguard® PRIMECAP Fund Admiral™ Shares	\$4,473,889	10.5%	0.310%
<b>Equity International</b>	<b>\$11,964,242</b>	<b>28.0%</b>	
Vanguard® International Value Fund	\$3,029,046	7.1%	0.350%
Vanguard® International Growth Fund Admiral™ Shares	\$2,928,677	6.8%	0.330%
Vanguard® Total International Stock Index Fund Inst Shares	\$6,006,519	14.0%	0.080%
<b>Total Fixed Income</b>	<b>\$10,700,554</b>	<b>25.0%</b>	
<b>Fixed Income Domestic</b>	<b>\$8,132,314</b>	<b>19.0%</b>	
Vanguard® Short-Term Investment-Grade Fund Adm™ Shares	\$1,293,629	3.0%	0.100%
Vanguard® Total Bond Market Index Fund Admiral™ Shares	\$4,270,823	10.0%	0.050%
Vanguard® Inter-Term Investment-Grade Fund Adm™ Shares	\$2,567,861	6.0%	0.100%
<b>Fixed Income International</b>	<b>\$2,568,240</b>	<b>6.0%</b>	
Vanguard® Total International Bond Index Fund Adm™ Shares	\$2,568,240	6.0%	0.110%
<b>Total</b>	<b>\$42,783,888</b>	<b>100.0%</b>	<b>0.140%</b>

# Economic and Market Outlook

# Vanguard October 2021 market and economic outlook at a glance

## Key takeaways:

- Because of the COVID-19 resurgence, we're revising downward our forecast for full-year U.S. growth to around 6% from our previous expectation of around 7.5%.
- Vanguard has changed our outlook for the start of the Federal Reserve's tapering of its asset purchases from the first quarter of 2022 to the fourth quarter of 2021.
- We foresee core inflation exceeding central bank targets in the United States and the United Kingdom in the months ahead and settling below the inflation targets in China and the euro area.
- Vanguard continues to expect that the U.S. unemployment rate will fall toward the mid-4% range by year-end.

## Asset-class return outlooks

Our 10-year, annualized, nominal return projections, as of June 30, 2021, are shown below. Please note that the figures are based on a 1.0-point range around the rounded 50th percentile of the distribution of return outcomes for equities and a 0.5-point range around the rounded 50th percentile for fixed income.

Equities	Return projection	Median volatility
U.S. equities	2.3%–4.3%	16.7%
U.S. value	2.9%–4.9%	18.9%
U.S. growth	–0.6%–1.4%	17.7%
U.S. large-cap	2.2%–4.2%	16.3%
U.S. small-cap	2.1%–4.1%	21.8%
U.S. real estate investment trusts	2.2%–4.2%	19.3%
Global equities ex-U.S. (unhedged)	5.1%–7.1%	18.7%
U.S. inflation	1.4%–2.4%	2.3%

Fixed income	Return projection	Median volatility
U.S. aggregate bonds	1.3%–2.3%	4.5%
U.S. Treasury bonds	1.1%–2.1%	4.6%
U.S. credit bonds	1.5%–2.5%	4.6%
U.S. high-yield corporate bonds	1.9%–2.9%	10.4%
U.S. Treasury Inflation-Protected Securities	0.9%–1.9%	7.0%
U.S. cash	1.2%–2.2%	1.2%
Global bonds ex-U.S. (hedged)	1.2%–2.2%	3.8%
Emerging markets sovereign bonds	1.9%–2.9%	10.2%

These probabilistic return assumptions depend on current market conditions and, as such, may change over time.

**IMPORTANT: The projections or other information generated by the Vanguard Capital Markets Model® regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from the VCMM are derived from 10,000 simulations for each modeled asset class. Simulations are as of June 30, 2021. Results from the model may vary with each use and over time. For more information, see Important information page.**

Source: Vanguard Investment Strategy Group.

# Vanguard October 2021 market and economic outlook at a glance



## Region-by-region outlook

### U.S. economic growth holds up, while the risks for China increase

**United States.** We lowered our third-quarter and, thus, full-year growth forecasts for the United States in response to the consumer supply constraints and the resurgence of COVID-19 owing to the spread of the Delta variant.

- The current slowdown coupled with a weaker-than-expected annual growth rate of 6.6% in the second quarter led us to revise our forecast for full-year growth downward, to around 6%, from our previous forecast of around 7.5%.
- We still expect fourth-quarter growth at an annual rate of around 5.5% and estimate GDP growth for all of 2022 will be around 3.5% to 4.0%.
- Under our revised forecasts, the United States would reach its pre-pandemic growth trend in the first quarter of 2022, rather than the fourth quarter of 2021.

**Euro area.** Daily new cases of COVID-19 have fallen recently in previous hot spots such as Spain and France, and hospitalizations appear to have peaked across the euro area. We maintain our view of full-year GDP growth of around 5%.

- On September 9, the European Central Bank revised its full-year euro area growth forecast from 4.6% to 5.0%, bringing its view in line with ours.
- Gross domestic product grew by a seasonally adjusted 2.2% in the second quarter compared with the first quarter, according to the most recent estimate by Eurostat.

**China.** Risks to economic growth remain tilted to the downside in China, despite the most recent outbreak of the COVID-19 Delta variant appearing to be under control. Given the highly contagious nature of the Delta variant and the relatively low efficacy of China's vaccine, the risk of further outbreaks and lockdowns remains elevated.

- We continue to anticipate full-year economic growth in China at just below 8.5%.
- Chinese government data released September 15 showed slowing growth in both industrial production and retail sales.
- August export data were stronger than expected, helped by a temporary diversion of orders from Southeast Asian nations dealing with COVID-19 and resilient demand from developed markets for tech-related and capital goods.

**Emerging markets.** COVID-19 continues to have a divergent story in emerging markets. Emerging Asia, which we had anticipated at the start of the year would be the strongest emerging region for growth, has been beset by low vaccination rates and—given its many “zero-COVID” lockdowns—a low rate of infection-acquired immunity as well. The region has struggled with rising case counts.

- Latin America, which had been hit hard by the coronavirus around midyear, has continued to see case counts fall in recent weeks.
- We're watching for the degree to which some of the world's more developed emerging markets, such as South Korea, might be able to use their relatively higher vaccination rates to move away from zero-COVID lockdown approaches, which can weigh on growth.

# Vanguard October 2021 market and economic outlook at a glance



Strong labor  
market reports will  
be key

## The Fed's asset-purchase tapering may begin sooner

Minutes of the Federal Open Market Committee's (FOMC's) July 27–28 meeting suggest the Federal Reserve plans to start to reduce the pace of its asset purchases this year. We've changed our estimate of when such asset-purchase tapering may begin from the first quarter of 2022 to the fourth quarter of 2021.

- We believe the Fed will want to see further strong labor market reports before formalizing a tapering plan. (A strong jobs report for July was followed by a relatively weak August report.)
- The July meeting minutes show that while most FOMC members believe the Fed has met its price-stability goal for initiating the removal of its policy recommendations, it hasn't met its maximum-employment goal.

## Inflation may not settle down as soon as expected

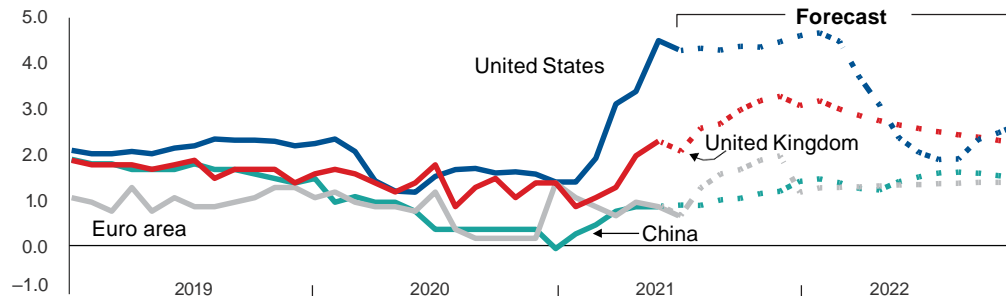
The inflation environment is likely to be more volatile in coming years than we've come to expect recently. Vanguard's view is that the consensus is too sanguine about inflation in the United States settling into its pre-pandemic trend of 2.0% in 2022.

- In our base case, we anticipate that the core Consumer Price Index (CPI)—which excludes volatile food and energy prices—will come in around or above 3% through the first quarter of 2022, settle back just below 2% for some time, and end 2022 above the Federal Reserve's target of 2%.
- Risks for higher inflation include the potential that current supply-and-demand dislocations could prove less transitory than expected and that inflation expectations could become dislodged and put upward pressure on actual inflation.
- Globally, prices have risen as demand has returned to normal levels amid supply shortages in goods, services, and even labor.
- We foresee core inflation exceeding central bank targets in the United States and the United Kingdom in the months ahead and settling below the targets in China and the euro area.



More inflation  
volatility  
ahead?

## Resurgent demand and supply constraints push up prices



Note: Data and Vanguard forecasts are for year-over-year percentage changes in the core CPI, which excludes volatile food and energy prices. Actual inflation is through July 2021 for the United States and the euro area and through June 2021 for the United Kingdom and China. Vanguard forecasts are presented thereafter.

Sources: Vanguard calculations, using data from Bloomberg and Refinitiv.



## Vanguard October 2021 market and economic outlook at a glance



Labor market hits  
a speed bump

### Employment outlook should brighten

Job creation in the U.S. paused in July, with growth in job creation slowing to a seven-month low of 235,000. Vanguard believes the number belies the strength of the U.S. labor market.

- Vanguard continues to foresee the unemployment rate falling toward the mid-4% range by year-end.
- Provided the rate of new COVID-19 Delta variant cases doesn't require interventions that could change the trajectory of the economic recovery, we foresee a number of forces aligning that should spur a strong upswing in employment in the coming months.
- Three-month average job growth stands at 750,000, and we anticipate average monthly job growth of around 700,000 for the rest of the year given businesses' significant need for labor and the expiration of pandemic-related unemployment insurance benefits

## VCMM simulation summary statistics

### 10-Year projected returns annualized as of June 30, 2021

10-Year horizon	Distribution of geometric returns							Median volatility
	5	10	25	50	75	90	95	
U.S. Equities	-3.7%	-2.1%	0.6%	3.3%	6.1%	8.6%	10.3%	16.7%
Non-U.S. Equities (unhedged)	-0.2%	1.2%	3.5%	6.1%	8.7%	11.1%	12.4%	18.8%
Global Equities (unhedged)	-1.4%	-0.1%	2.1%	4.5%	6.9%	9.1%	10.5%	16.5%
Emerging Markets	-5.4%	-2.7%	1.1%	4.6%	8.2%	11.4%	13.3%	27.0%
Developed Markets ex-U.S.	0.4%	1.5%	3.7%	6.2%	8.8%	11.0%	12.4%	16.4%
U.S. Bonds	0.6%	0.8%	1.3%	1.8%	2.3%	2.8%	3.2%	4.5%
Non-U.S. Bonds (hedged)	0.2%	0.5%	1.0%	1.7%	2.6%	3.4%	4.0%	3.8%
Emerging Market Bonds (hedged)	-0.3%	0.5%	1.5%	2.4%	3.3%	4.0%	4.5%	10.2%
Global Bonds (hedged)	0.4%	0.7%	1.1%	1.7%	2.4%	3.1%	3.6%	3.8%
U.S. High Yield Bonds	0.1%	0.6%	1.4%	2.4%	3.4%	4.3%	4.9%	10.4%
Total Credit Bonds	0.8%	1.1%	1.5%	2.1%	2.6%	3.2%	3.6%	5.8%
Mortgage Backed Securities	0.8%	1.1%	1.6%	2.2%	2.7%	3.2%	3.5%	4.0%
Long-Term Credit Bonds	-0.4%	0.1%	0.9%	1.8%	2.8%	3.7%	4.3%	11.4%
Long-Term Gov't/Credit Index	-0.3%	0.2%	1.0%	2.0%	2.9%	3.9%	4.4%	9.8%
Intermediate-Term Credit Bonds	0.8%	1.0%	1.5%	2.0%	2.6%	3.2%	3.6%	4.6%
Short-Term Credit Bonds	0.9%	1.1%	1.5%	2.1%	2.8%	3.5%	3.9%	2.6%
Long-Term Treasuries	-1.2%	-0.5%	0.5%	1.7%	2.9%	4.0%	4.6%	11.9%
Intermediate-Term Treasuries	-0.1%	0.2%	0.7%	1.3%	1.8%	2.4%	2.7%	5.4%
Short-Term Treasuries	0.2%	0.3%	0.8%	1.4%	2.2%	2.9%	3.3%	2.6%
Extended Duration	-3.7%	-2.6%	-0.8%	1.3%	3.3%	5.4%	6.2%	18.8%
Treasury 10 year	-0.5%	-0.1%	0.5%	1.2%	1.8%	2.4%	2.8%	7.3%
TIPS - Intermediate-Term	-0.3%	0.0%	0.6%	1.4%	2.3%	3.1%	3.7%	4.6%
TIPS - Short-Term	-0.2%	0.1%	0.6%	1.4%	2.3%	3.3%	3.9%	3.2%
REITs	-5.1%	-3.1%	-0.2%	3.1%	6.5%	9.8%	11.6%	19.4%
Commodities	-4.5%	-2.6%	0.9%	4.8%	8.6%	12.2%	14.4%	16.0%
Market Neutral	-0.5%	0.3%	1.7%	3.2%	4.7%	6.2%	7.1%	6.0%
Cash	0.2%	0.4%	0.9%	1.7%	2.6%	3.5%	4.0%	1.2%
Inflation	-0.2%	0.3%	1.1%	1.9%	2.7%	3.5%	3.9%	2.3%
Hedge Funds	-2.7%	-1.1%	1.0%	3.4%	5.7%	7.9%	9.2%	12.8%
Private Equity	-1.9%	1.0%	4.6%	8.0%	11.3%	14.4%	16.2%	16.8%
Alternative Strategies Fund	-1.0%	0.0%	1.7%	3.6%	5.6%	7.5%	8.6%	8.0%
Global Minimum Volatility	-0.9%	0.2%	2.1%	4.1%	6.2%	8.1%	9.2%	13.3%
Private Real Estate	-0.3%	0.8%	2.5%	4.4%	6.4%	8.3%	9.3%	16.4%

**IMPORTANT:** The projections or other information generated by the Vanguard Capital Markets Model® (VCMM) regarding the likelihood of various investment outcomes are hypothetical in nature, do not reflect actual investment results, and are not guarantees of future results. Distribution of return outcomes from VCMM derived from 10,000 simulations for each modeled asset class. Simulations as of June 30, 2021. Results from the model may vary with each use and over time. For more information on VCMM, see the Important Information slide.

Source: Vanguard, Investment Strategy Group.

# VCMM simulation summary statistics

## 10-Year median asset-class correlations as of June 30, 2021

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
01 U.S. Equities	1.00																																
02 Non-U.S. Equities (u)	0.78	1.00																															
03 Global Equities (u)	0.97	0.92	1.00																														
04 Emerging Markets (u)	0.70	0.92	0.84	1.00																													
05 Developed Markets ex-U.S. (u)	0.74	0.94	0.87	0.72	1.00																												
06 U.S. Bonds	-0.24	-0.18	-0.23	-0.14	-0.19	1.00																											
07 Non-U.S. Bonds (h)	-0.19	-0.21	-0.21	-0.19	-0.21	0.70	1.00																										
08 Emerging Market Bonds (h)	0.44	0.52	0.50	0.64	0.33	0.47	0.32	1.00																									
09 Global Bonds (h)	-0.23	-0.23	-0.24	-0.19	-0.23	0.89	0.95	0.41	1.00																								
10 U.S. High Yield Bonds	0.28	0.28	0.30	0.30	0.22	0.36	0.17	0.44	0.27	1.00																							
11 Total Credit Bonds	0.13	0.18	0.16	0.19	0.15	0.85	0.51	0.58	0.71	0.60	1.00																						
12 Mortgage Backed Securities	-0.37	-0.36	-0.39	-0.31	-0.35	0.85	0.65	0.30	0.79	0.27	0.57	1.00																					
13 Long-Term Credit Bonds	0.22	0.27	0.25	0.27	0.24	0.70	0.36	0.52	0.55	0.44	0.92	0.30	1.00																				
14 Long-Term Gov't/Credit Index	-0.07	0.00	-0.04	0.02	-0.02	0.86	0.53	0.48	0.73	0.30	0.85	0.53	0.91	1.00																			
15 Intermediate-Term Credit Bonds	0.05	0.09	0.07	0.11	0.05	0.87	0.56	0.54	0.75	0.65	0.95	0.70	0.73	0.70	1.00																		
16 Short-Term Credit Bonds	-0.01	0.04	0.01	0.08	0.00	0.70	0.52	0.39	0.64	0.54	0.73	0.61	0.44	0.41	0.86	1.00																	
17 Long-Term Treasuries	-0.46	-0.41	-0.46	-0.37	-0.39	0.79	0.57	0.24	0.72	-0.01	0.45	0.66	0.43	0.79	0.40	0.21	1.00																
18 Intermediate-Term Treasuries	-0.45	-0.40	-0.45	-0.35	-0.39	0.93	0.69	0.30	0.85	0.15	0.60	0.91	0.38	0.66	0.69	0.57	0.82	1.00															
19 Short-Term Treasuries	-0.33	-0.29	-0.33	-0.23	-0.30	0.84	0.68	0.28	0.80	0.23	0.56	0.88	0.26	0.45	0.72	0.78	0.54	0.90	1.00														
20 Extended Duration	-0.44	-0.40	-0.45	-0.36	-0.39	0.76	0.54	0.23	0.69	-0.03	0.42	0.61	0.43	0.79	0.35	0.16	1.00	0.77	0.48	1.00													
21 Treasury 10 year	-0.47	-0.42	-0.48	-0.37	-0.40	0.91	0.67	0.30	0.83	0.09	0.56	0.85	0.41	0.74	0.60	0.44	0.92	0.97	0.78	0.89	1.00												
22 TIPS - Intermediate-Term	-0.35	-0.28	-0.34	-0.19	-0.31	0.79	0.58	0.32	0.72	0.25	0.55	0.76	0.37	0.57	0.61	0.52	0.66	0.83	0.77	0.62	0.79	1.00											
23 TIPS - Short-Term	-0.23	-0.17	-0.22	-0.06	-0.23	0.65	0.48	0.30	0.59	0.31	0.48	0.62	0.30	0.43	0.55	0.55	0.45	0.64	0.71	0.41	0.58	0.92	1.00										
24 REITs	0.59	0.51	0.59	0.46	0.47	-0.07	-0.04	0.32	-0.06	0.30	0.14	-0.17	0.13	0.00	0.13	0.09	-0.21	-0.22	-0.15	-0.20	-0.23	-0.14	-0.09	1.00									
25 Commodities	0.22	0.27	0.26	0.27	0.24	-0.08	-0.09	0.20	-0.10	0.34	0.06	-0.07	0.03	-0.07	0.07	0.08	-0.19	-0.15	-0.08	-0.18	-0.17	0.04	0.15	0.22	1.00								
26 Market Neutral	0.01	-0.03	-0.01	-0.02	-0.05	0.09	0.11	0.04	0.10	0.06	0.10	0.06	0.06	0.05	0.12	0.16	0.01	0.04	0.11	0.01	0.03	0.06	0.08	0.16	0.10	1.00							
27 Cash	0.00	0.06	0.03	0.09	0.02	0.24	0.38	0.16	0.33	0.11	0.18	0.29	0.01	0.02	0.28	0.52	0.02	0.22	0.50	0.00	0.14	0.25	0.35	0.07	0.11	0.22	1.00						
28 Inflation	0.01	0.03	0.02	0.12	-0.05	0.05	0.02	0.13	0.03	0.18	0.09	-0.03	0.16	0.15	0.01	0.00	0.10	-0.04	-0.02	0.11	0.00	0.42	0.61	0.03	0.34	0.02	0.13	1.00					
29 Hedge Funds	0.58	0.62	0.63	0.58	0.57	-0.11	-0.11	0.34	-0.13	0.44	0.14	-0.15	0.13	-0.04	0.14	0.09	-0.28	-0.26	-0.19	-0.27	-0.28	-0.18	-0.09	0.49	0.49	0.17	0.05	0.05	1.00				
30 Private Equity	0.62	0.50	0.61	0.44	0.49	-0.18	-0.17	0.25	-0.19	0.38	0.03	-0.18	0.02	-0.12	0.04	0.00	-0.29	-0.27	-0.21	-0.28	-0.29	-0.23	-0.18	0.42	0.33	-0.06	-0.05	-0.03	0.65	1.00			
31 Alternative Strategies Fund	0.00	0.12	0.05	0.13	0.10	0.07	0.08	0.03	0.08	0.15	0.08	0.05	0.04	0.03	0.11	0.14	0.01	0.04	0.09	0.00	0.02	0.05	0.06	0.23	0.19	0.30	0.18	0.02	0.28	0.07	1.00		
32 Global Minimum Volatility	0.92	0.87	0.96	0.73	0.88	-0.23	-0.18	0.42	-0.22	0.25	0.15	-0.37	0.23	-0.05	0.06	0.02	-0.45	-0.43	-0.31	-0.44	-0.46	-0.34	-0.23	0.55	0.16	0.01	0.06	-0.03	0.54	0.57	-0.01	1.00	
33 Private Real Estate	0.66	0.54	0.65	0.49	0.51	-0.09	-0.05	0.34	-0.08	0.31	0.16	-0.21	0.16	-0.01	0.14	0.10	-0.25	-0.25	-0.16	-0.25	-0.26	-0.18	-0.10	0.96	0.24	0.38	0.10	0.02	0.54	0.46	0.28	0.61	1.00

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Source: Vanguard, Investment Strategy Group.

## VCMM simulation summary statistics

### 30-Year projected returns annualized as of June 30, 2021

30-Year horizon	Distribution of geometric returns							Median volatility
	5	10	25	50	75	90	95	
U.S. Equities	2.5%	3.2%	4.2%	5.3%	6.4%	7.4%	8.0%	17.8%
Non-U.S. Equities (unhedged)	4.6%	5.3%	6.6%	8.0%	9.4%	10.6%	11.4%	19.4%
Global Equities (unhedged)	3.9%	4.5%	5.4%	6.5%	7.5%	8.5%	9.1%	17.3%
Emerging Markets	0.4%	3.0%	5.3%	7.5%	9.5%	11.2%	12.2%	28.0%
Developed Markets ex-U.S.	4.2%	4.9%	6.1%	7.5%	8.8%	10.0%	10.8%	17.1%
U.S. Bonds	1.8%	2.1%	2.6%	3.1%	3.7%	4.3%	4.7%	5.1%
Non-U.S. Bonds (hedged)	1.3%	1.6%	2.1%	2.8%	3.5%	4.2%	4.7%	4.6%
Emerging Market Bonds (hedged)	3.1%	3.8%	4.6%	5.3%	6.0%	6.6%	7.0%	11.6%
Global Bonds (hedged)	1.4%	1.7%	2.2%	2.9%	3.6%	4.2%	4.6%	4.5%
U.S. High Yield Bonds	2.9%	3.3%	4.0%	4.7%	5.5%	6.3%	6.7%	11.0%
Total Credit Bonds	2.4%	2.6%	3.1%	3.6%	4.2%	4.7%	5.1%	6.2%
Mortgage Backed Securities	2.0%	2.3%	2.8%	3.5%	4.2%	4.7%	5.1%	4.5%
Long-Term Credit Bonds	2.0%	2.3%	2.8%	3.3%	3.9%	4.5%	4.9%	12.0%
Long-Term Gov't/Credit Index	1.8%	2.1%	2.6%	3.1%	3.7%	4.3%	4.7%	10.5%
Intermediate-Term Credit Bonds	2.2%	2.5%	3.0%	3.6%	4.2%	4.8%	5.1%	5.0%
Short-Term Credit Bonds	2.1%	2.4%	2.9%	3.5%	4.1%	4.7%	5.1%	3.0%
Long-Term Treasuries	0.9%	1.3%	1.8%	2.4%	3.0%	3.6%	4.0%	12.9%
Intermediate-Term Treasuries	1.2%	1.5%	2.0%	2.6%	3.2%	3.7%	4.0%	6.1%
Short-Term Treasuries	1.2%	1.5%	2.0%	2.7%	3.5%	4.1%	4.5%	3.2%
Extended Duration	-0.5%	0.0%	0.7%	1.5%	2.3%	3.2%	3.8%	20.4%
Treasury 10 year	1.1%	1.3%	1.8%	2.3%	2.9%	3.4%	3.7%	7.7%
TIPS - Intermediate-Term	1.0%	1.3%	1.9%	2.5%	3.3%	4.1%	4.6%	5.1%
TIPS - Short-Term	1.0%	1.3%	1.8%	2.5%	3.3%	4.1%	4.6%	3.7%
REITs	0.3%	1.4%	3.0%	4.8%	6.7%	8.4%	9.5%	20.3%
Commodities	0.0%	1.2%	3.3%	5.6%	7.9%	10.1%	11.4%	16.7%
Market Neutral	1.7%	2.2%	3.1%	4.1%	5.1%	6.1%	6.6%	6.4%
Cash	1.1%	1.4%	2.0%	2.6%	3.4%	4.0%	4.4%	1.8%
Inflation	0.6%	0.9%	1.3%	1.9%	2.4%	2.9%	3.2%	2.7%
Hedge Funds	1.1%	2.0%	3.3%	4.8%	6.2%	7.5%	8.2%	13.5%
Private Equity	3.2%	5.0%	7.5%	10.0%	12.3%	14.3%	15.5%	19.5%
Alternative Strategies Fund	1.6%	2.2%	3.3%	4.6%	5.9%	7.0%	7.7%	8.5%
Global Minimum Volatility	3.5%	4.1%	4.9%	5.9%	6.9%	7.8%	8.3%	13.9%
Private Real Estate	3.4%	4.1%	5.1%	6.3%	7.5%	8.6%	9.2%	17.0%

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Source: Vanguard, Investment Strategy Group.

# VCMM simulation summary statistics

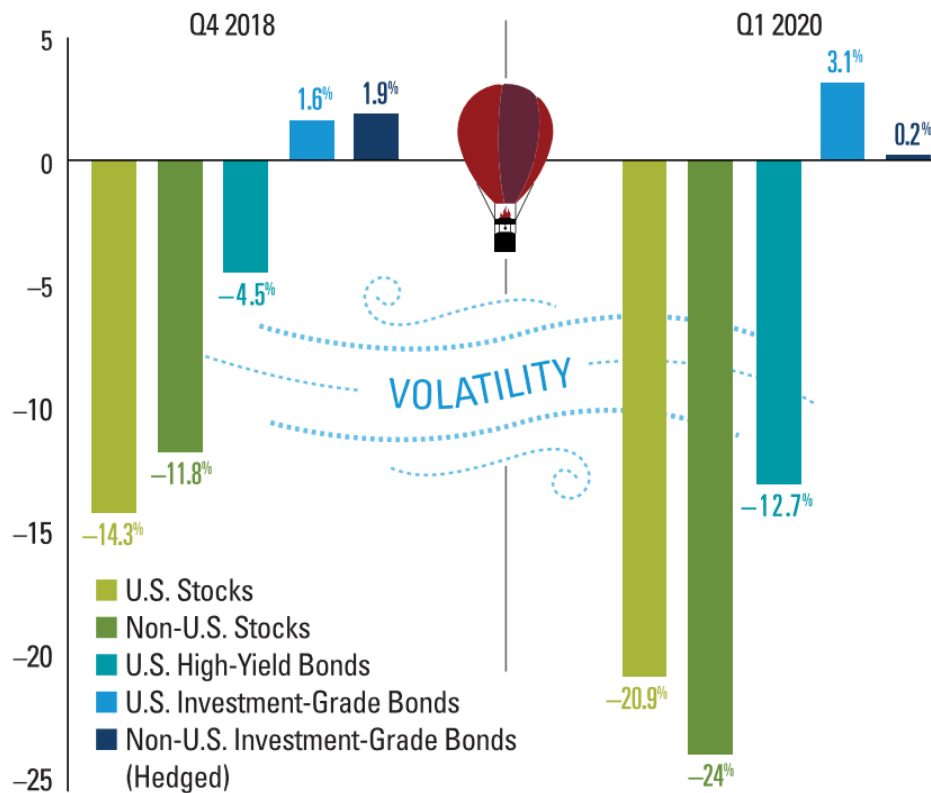
## 30-Year median asset-class correlations as of June 30, 2021

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
01 U.S. Equities	1.00																																
02 Non-U.S. Equities (u)	0.75	1.00																															
03 Global Equities (u)	0.96	0.91	1.00																														
04 Emerging Markets (u)	0.68	0.91	0.83	1.00																													
05 Developed Markets ex-U.S. (u)	0.70	0.93	0.84	0.70	1.00																												
06 U.S. Bonds	-0.22	-0.21	-0.23	-0.18	-0.20	1.00																											
07 Non-U.S. Bonds (h)	-0.13	-0.21	-0.17	-0.20	-0.19	0.69	1.00																										
08 Emerging Market Bonds (h)	0.44	0.52	0.50	0.62	0.34	0.39	0.23	1.00																									
09 Global Bonds (h)	-0.18	-0.23	-0.21	-0.21	-0.22	0.88	0.95	0.32	1.00																								
10 U.S. High Yield Bonds	0.25	0.23	0.26	0.24	0.19	0.36	0.18	0.40	0.28	1.00																							
11 Total Credit Bonds	0.11	0.12	0.12	0.12	0.10	0.85	0.51	0.52	0.70	0.57	1.00																						
12 Mortgage Backed Securities	-0.31	-0.33	-0.34	-0.30	-0.31	0.85	0.65	0.24	0.79	0.30	0.60	1.00																					
13 Long-Term Credit Bonds	0.19	0.23	0.21	0.22	0.20	0.68	0.34	0.49	0.52	0.42	0.90	0.32	1.00																				
14 Long-Term Gov't/Credit Index	-0.07	-0.04	-0.06	-0.02	-0.04	0.84	0.49	0.43	0.69	0.29	0.84	0.53	0.90	1.00																			
15 Intermediate-Term Credit Bonds	0.03	0.03	0.03	0.03	0.01	0.87	0.57	0.47	0.75	0.62	0.94	0.73	0.70	0.68	1.00																		
16 Short-Term Credit Bonds	-0.01	-0.03	-0.02	-0.02	-0.03	0.70	0.56	0.30	0.66	0.50	0.70	0.66	0.39	0.38	0.84	1.00																	
17 Long-Term Treasuries	-0.41	-0.39	-0.42	-0.34	-0.36	0.78	0.53	0.20	0.69	0.02	0.47	0.63	0.46	0.80	0.42	0.23	1.00																
18 Intermediate-Term Treasuries	-0.39	-0.38	-0.41	-0.35	-0.36	0.93	0.68	0.24	0.84	0.19	0.62	0.90	0.40	0.66	0.71	0.60	0.80	1.00															
19 Short-Term Treasuries	-0.26	-0.27	-0.28	-0.25	-0.26	0.83	0.70	0.21	0.80	0.25	0.57	0.88	0.26	0.42	0.73	0.82	0.49	0.88	1.00														
20 Extended Duration	-0.40	-0.38	-0.41	-0.34	-0.36	0.74	0.49	0.18	0.64	-0.01	0.44	0.57	0.45	0.79	0.37	0.17	1.00	0.75	0.42	1.00													
21 Treasury 10 year	-0.42	-0.40	-0.44	-0.36	-0.38	0.91	0.64	0.24	0.81	0.13	0.59	0.83	0.44	0.74	0.63	0.46	0.91	0.97	0.75	0.87	1.00												
22 TIPS - Intermediate-Term	-0.31	-0.29	-0.32	-0.23	-0.31	0.79	0.59	0.25	0.73	0.24	0.56	0.77	0.37	0.56	0.63	0.55	0.65	0.83	0.77	0.61	0.79	1.00											
23 TIPS - Short-Term	-0.20	-0.20	-0.21	-0.13	-0.23	0.65	0.53	0.22	0.62	0.27	0.48	0.65	0.29	0.41	0.56	0.59	0.44	0.65	0.74	0.40	0.58	0.92	1.00										
24 REITs	0.58	0.48	0.58	0.44	0.45	-0.06	-0.02	0.32	-0.04	0.27	0.12	-0.14	0.13	0.00	0.11	0.07	-0.18	-0.18	-0.11	-0.18	-0.19	-0.13	-0.07	1.00									
25 Commodities	0.21	0.26	0.25	0.25	0.22	-0.06	-0.06	0.19	-0.07	0.31	0.05	-0.05	0.02	-0.07	0.07	0.09	-0.17	-0.13	-0.04	-0.17	-0.15	0.06	0.16	0.21	1.00								
26 Market Neutral	0.02	-0.04	0.00	-0.03	-0.04	0.10	0.15	0.02	0.13	0.06	0.10	0.10	0.05	0.03	0.14	0.21	0.00	0.07	0.17	-0.01	0.04	0.09	0.13	0.16	0.12	1.00							
27 Cash	0.04	0.01	0.03	0.00	0.01	0.26	0.44	0.07	0.39	0.11	0.18	0.36	0.00	0.00	0.30	0.58	0.01	0.25	0.58	-0.03	0.15	0.32	0.45	0.06	0.15	0.29	1.00						
28 Inflation	0.01	0.01	0.01	0.09	-0.06	0.06	0.06	0.09	0.07	0.13	0.08	0.00	0.14	0.15	0.02	0.03	0.11	-0.01	0.03	0.12	0.02	0.42	0.60	0.03	0.33	0.05	0.17	1.00					
29 Hedge Funds	0.55	0.59	0.60	0.55	0.54	-0.11	-0.10	0.35	-0.11	0.40	0.11	-0.13	0.11	-0.04	0.10	0.05	-0.24	-0.23	-0.15	-0.24	-0.25	-0.17	-0.10	0.46	0.46	0.16	0.03	0.03	1.00				
30 Private Equity	0.58	0.47	0.58	0.42	0.45	-0.13	-0.12	0.27	-0.14	0.36	0.04	-0.14	0.03	-0.09	0.05	0.01	-0.24	-0.22	-0.16	-0.24	-0.24	-0.20	-0.15	0.40	0.31	-0.05	-0.02	-0.05	0.62	1.00			
31 Alternative Strategies Fund	0.01	0.11	0.05	0.11	0.09	0.08	0.11	0.02	0.10	0.13	0.08	0.08	0.02	0.02	0.11	0.16	0.00	0.06	0.13	0.00	0.04	0.08	0.11	0.21	0.20	0.30	0.23	0.04	0.26	0.07	1.00		
32 Global Minimum Volatility	0.91	0.86	0.95	0.71	0.86	-0.21	-0.14	0.41	-0.19	0.22	0.11	-0.30	0.19	-0.07	0.03	0.00	-0.41	-0.38	-0.24	-0.41	-0.41	-0.32	-0.22	0.53	0.16	0.03	0.07	-0.04	0.51	0.54	-0.01	1.00	
33 Private Real Estate	0.65	0.51	0.63	0.47	0.48	-0.08	-0.02	0.33	-0.05	0.28	0.14	-0.15	0.14	-0.01	0.12	0.09	-0.22	-0.21	-0.11	-0.22	-0.22	-0.15	-0.08	0.96	0.24	0.37	0.10	0.03	0.51	0.44	0.26	0.59	1.00

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Source: Vanguard, Investment Strategy Group.

## Bonds have provided additional ballast to equity allocations



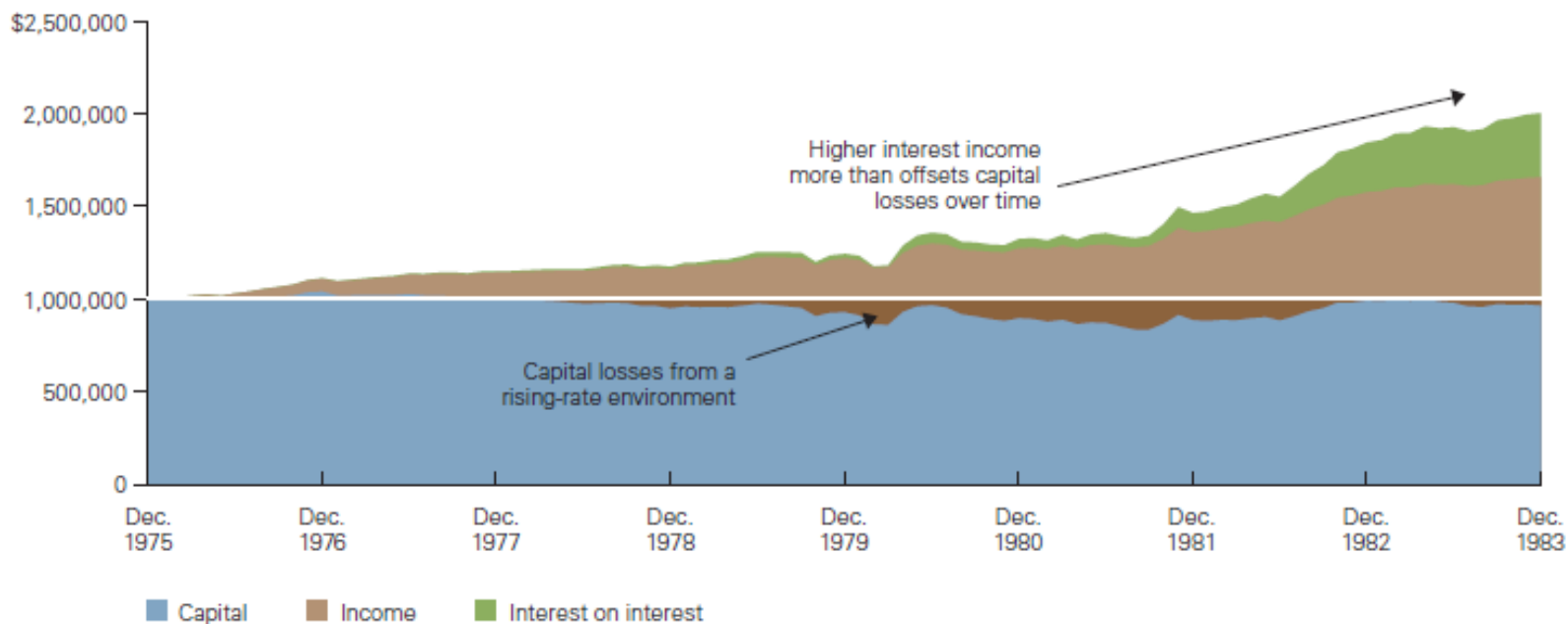
**Past performance is no guarantee of future results. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Source: Vanguard. U.S. stocks represented by CRSP US Total Market Index. Non-U.S. stocks represented by FTSE Global All Cap ex US Index. U.S. investment-grade bonds represented by Bloomberg Barclays US Aggregate Bond Index. U.S. high-yield bonds represented by Bloomberg Barclays US Corporate High Yield Bond Index. Non-U.S. investment-grade bonds (hedged) represented by Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index (USD Hedged).

## Interest income and reinvestment account for largest portion of total return in bond funds

### Bond investing in the 1970s and early 1980s

*Growth of a \$1 million investment in the Barclay's Capital U.S. Aggregate Bond Index, 1976–1983*

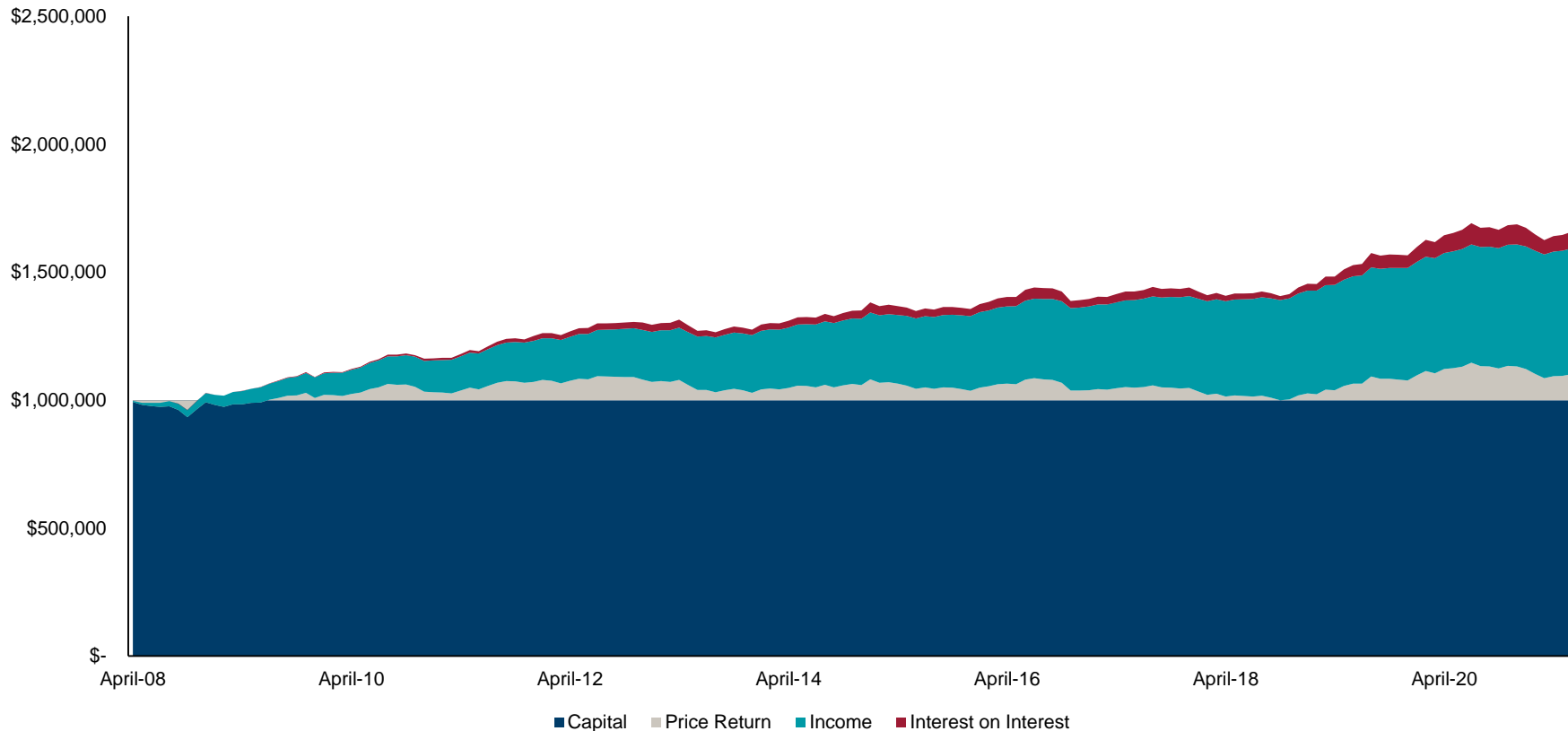


**Past performance is no guarantee of future results. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Source: Vanguard calculations based on capital, income, and total return data reported by Barclay's Capital.

Notes: For this example, we assume that an investor fully funds a \$1 million investment in the Barclay's Capital U.S. Aggregate Bond Index Index on January 1, 1976. We do not account for any expenses or taxes. Interest-on-interest return is calculated as the remainder after subtracting both income and capital returns from the total return.

## Bond investing in a low rate environment



**Past performance is no guarantee of future results. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index. The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' shares, when sold, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data cited. For performance data current to the most recent month-end, visit our website at [www.vanguard.com/performance](http://www.vanguard.com/performance).**

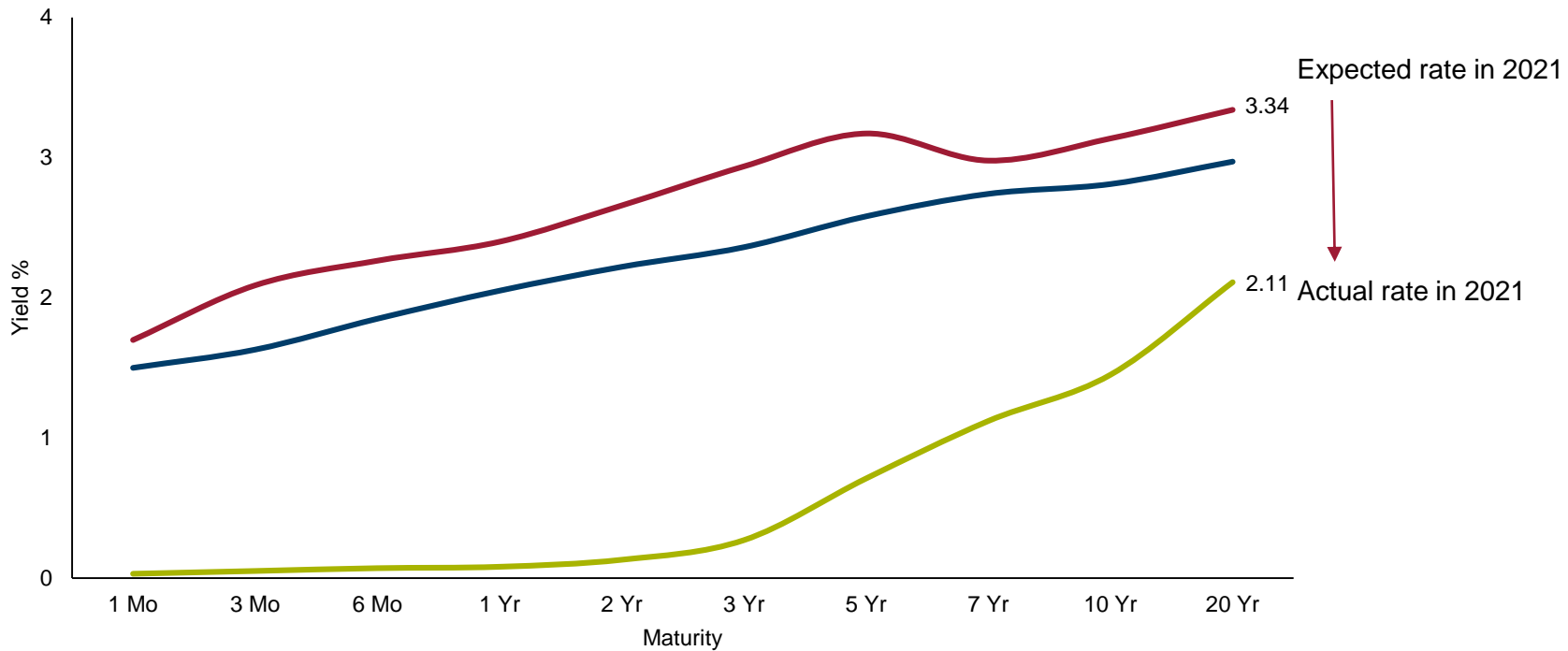
Source: Vanguard. Data is through June 30, 2021.

Notes: For this example, we assume that an investor fully funds a \$1 million investment in the Vanguard Total Bond Market Admiral Shares on April 1, 2008. Interest on interest calculated as the remainder after subtracting both income and price returns from the total return. Returns are net of expense ratio and assumes dividends are reinvested.



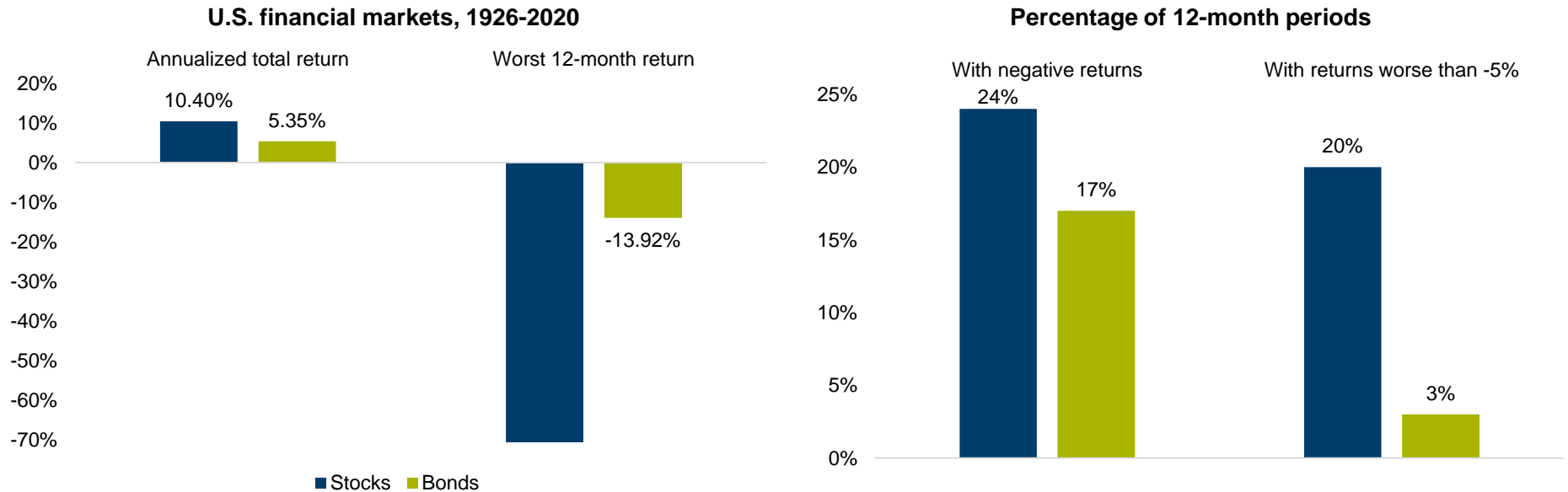
## Current interest rates rarely conform to expectations

Factors that drive interest rate changes are notoriously difficult to accurately predict



- Spot yield curve as of March 1, 2018
- Spot yield curve as of March 1, 2021
- 3-year forward yield curve as of March 1, 2018

## A bear market for bonds is nothing like a bear market for stocks



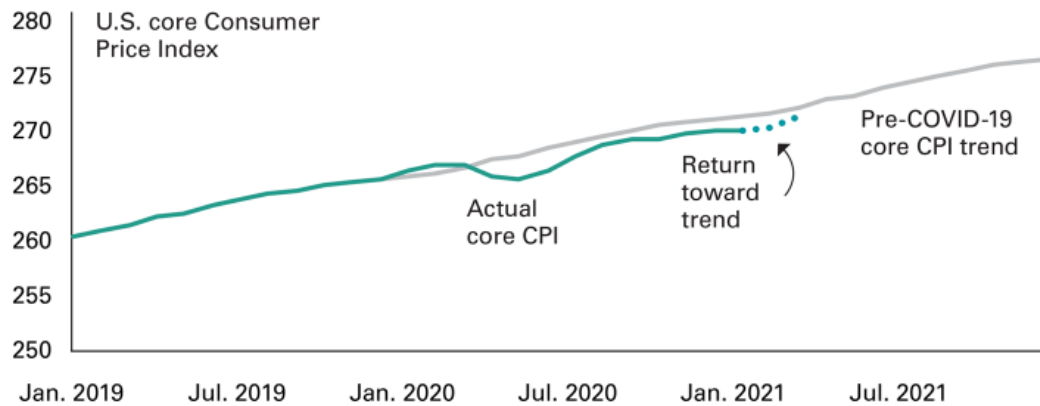
**Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

The following indexes were used for U.S. stock market returns: Standard & Poor's 90 from 1926 through March 3, 1957; the Standard & Poor's 500 Index from March 4, 1957, through 1974; the Wilshire 5000 Index from 1975 through April 22, 2005; the MSCI US Broad Market Index from April 23, 2005, through June 2, 2013; and the CRSP US Total Market Index thereafter. U.S. bond market returns: the Standard & Poor's High Grade Corporate Index from 1926 to 1968, the Citigroup High Grade Index from 1969 to 1972, the Lehman Brothers U.S. Long Credit AA Index 1973 to 1975, the Barclays Capital U.S. Aggregate Bond Index from 1976 to 2009, and the Bloomberg Barclays U.S. Aggregate Float Adjusted Index thereafter.

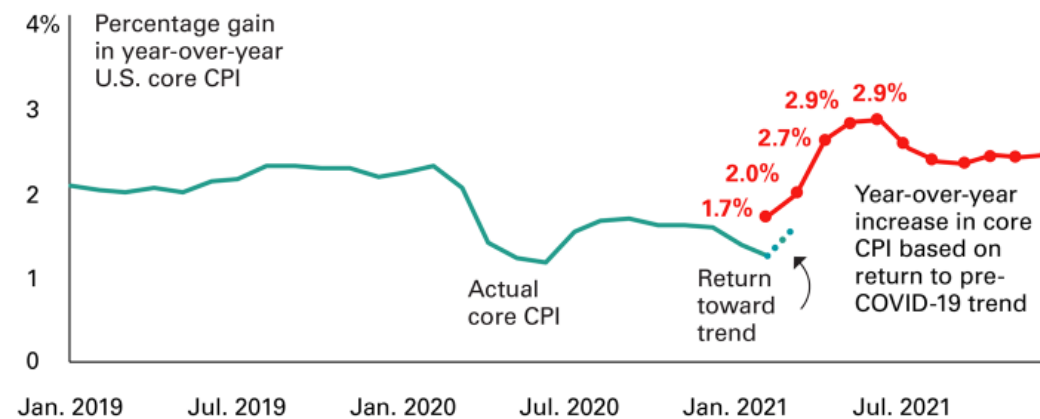
Source: Vanguard calculations using data from S&P, MSCI, Citigroup, and Barclays as of December 31, 2020.

## A real threat of persistent higher inflation

### If core CPI returns to trend this year ...

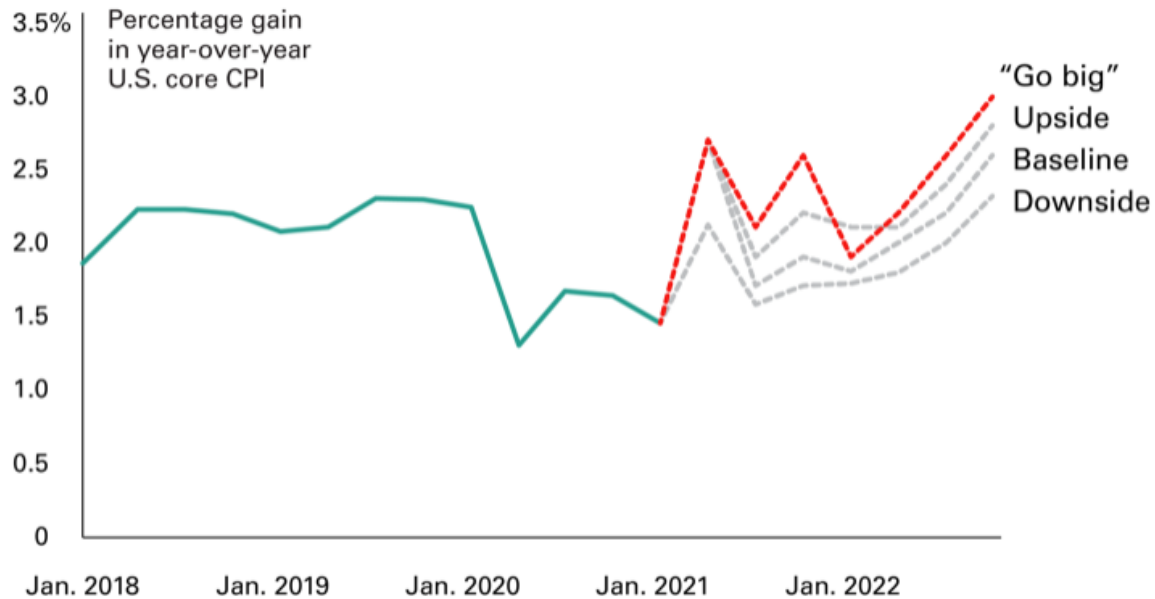


### ... monthly readings of year-over-year core CPI could become elevated



Sources: Vanguard assessment as of April 13, 2021, using data from the U.S. Bureau of Labor Statistics, Federal Reserve Economic Data, Federal Reserve Bank of Atlanta, Federal Reserve Bank of New York, and the U.S. Congressional Budget Office.

## Higher core inflation under most scenarios



Notes: Our scenarios are based on the following assumptions: Downside – net neutral additional spending (any additional spending offset by revenues), marginal increase in inflation expectations; Baseline - \$500 billion in fiscal spending above what has already been approved, a 10-basis-point increase in inflation expectations, and 7% GDP growth in 2021; Upside - \$1.5 trillion in fiscal spending above what has already been approved, a 20-basis-point increase in inflation expectations, and 7% GDP growth in 2021; "Go-big" - \$3 trillion in fiscal spending above what has already been approved, a 50-basis-point increase in inflation expectations, and GDP growth above 7% in 2021. The "Go big" scenario forecast dips below the upside forecast early in 2022 because of stronger base effects associated with the "Go big" scenario in 2021.

Sources: Vanguard assessment as of April 30, 2021, using data from the U.S. Bureau of Labor Statistics, Federal Reserve Economic Data, Federal Reserve Bank of Atlanta, Federal Reserve Bank of New York, and the U.S. Congressional Budget Office.

## Summary – equities vs. inflation

### 1-year periods

Portfolio	Frequency of outperformance	Average Outperformance	# of Periods
US Equities Outperform CPI	75.0%	16.0%	605
CPI Outperforms US Equities	25.0%	14.4%	605
Non-US Equities Outperform CPI	61.5%	20.0%	605
CPI Outperforms Non-US Equities	38.5%	13.1%	605

### 3-year periods

Portfolio	Frequency of outperformance	Average Outperformance	# of Periods
US Equities Outperform CPI	75.9%	11.7%	581
CPI Outperforms US Equities	24.1%	7.1%	581
Non-US Equities Outperform CPI	67.1%	11.7%	581
CPI Outperforms Non-US Equities	32.9%	6.9%	581

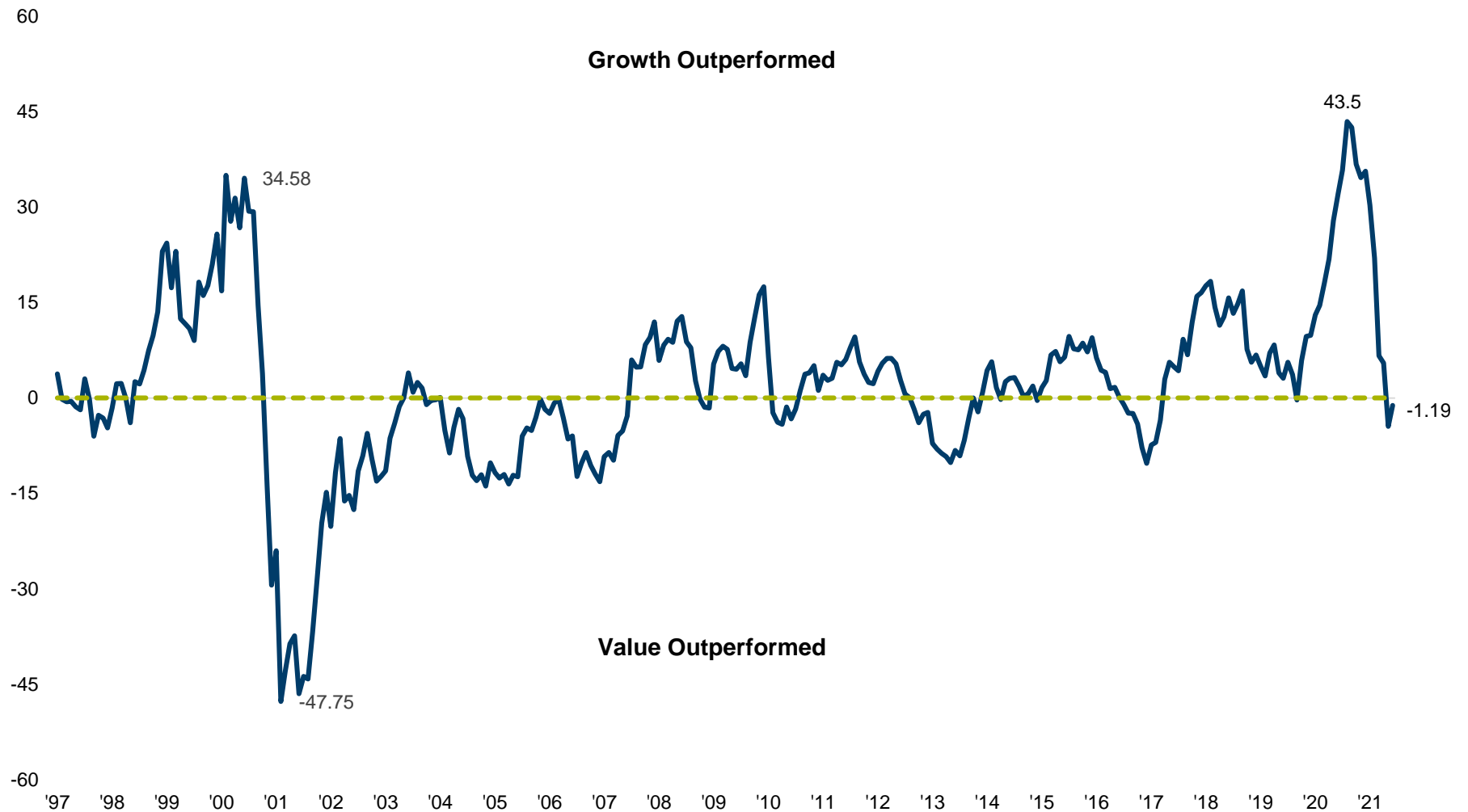
### 5-year periods

Portfolio	Frequency of outperformance	Average Outperformance	# of Periods
US Equities Outperform CPI	72.9%	11.0%	557
CPI Outperforms US Equities	27.1%	3.3%	557
Non-US Equities Outperform CPI	70.2%	9.1%	557
CPI Outperforms Non-US Equities	29.8%	3.0%	557

**Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Sources: Morningstar, FRED. Data as of 5/31/2021. All returns are annualized. US Equity represented by S&P 500 Index. Non-US Equity represented by MSCI EAFE Index through 4/30/1999, MSCI ACWI IMI Index thereafter. Inflation represented by Consumer Price Index for All Urban Consumers. All investing is subject to risk.

## Growth vs value return differentials



**Past performance is no guarantee of future returns. The performance of an index is not an exact representation of any particular investment, as you cannot invest directly in an index.**

Source: FactSet. Rolling 12 month periods for Russell 1000 Growth and Russell 1000 Value from 1/31/1997 through 6/30/2021. Data as of June 30, 2021. All investing is subject to risk.

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## Important information

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## Important information

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