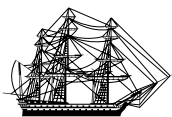


Vanguard ETF® strategic model portfolios

December 31, 2019



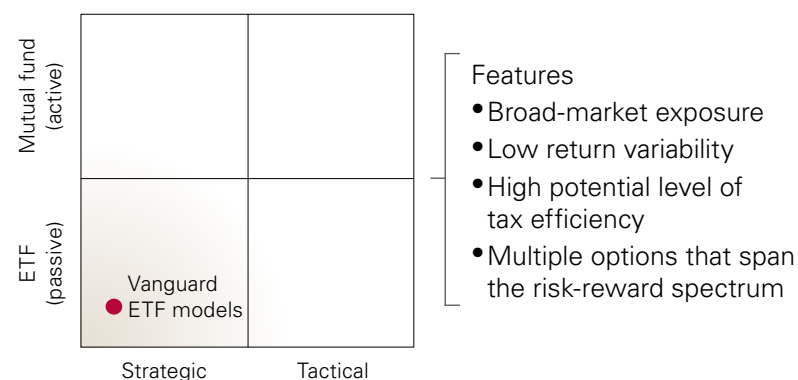
Vanguard®

Broadly diversified, low-cost index portfolios from a company you know and trust

Vanguard exchange-traded fund (ETF) strategic model portfolios offer:

- Broad-market stock and investment-grade¹ bond exposure, encompassing more than 21,000 global stocks and bonds.
- Diversified index investments that can help alleviate active manager risk in portfolios through lower return variability and low turnover.
- ETFs for transparency and potential tax efficiency.
- Low costs, with weighted average expense ratios ranging from 0.05% to 0.13%², enabling investors to keep more of their returns.
- Vanguard's 40+ years of experience in portfolio construction and indexing.

Vanguard models: A great foundation

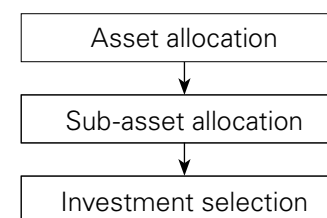


Take advantage of the experience of an industry leader

Vanguard ETF strategic model portfolios are created and maintained by our Investment Strategy Group, which is responsible for overseeing Vanguard's investment methodology, including portfolio construction and asset allocation modeling.

The group draws from Vanguard's more than 40 years of indexing experience to ensure that our model portfolios reflect our investment philosophy. We believe that investors maximize their chance of success when they select and stick with asset allocations—or mixes of stock, bond, and money market funds—that reflect their goals, tolerance for risk, and time horizons; diversify broadly within each asset class; and limit the costs of investing.

A firm belief in a top-down approach



To help investors and their advisors address diverse needs, we offer our ETF strategic model portfolios in a range of stock/bond allocations. All our balanced model portfolios provide exposure to U.S. and international stocks and global investment-grade bonds, except for our Tax-Efficient Series, whose fixed income allocation focuses on U.S. municipal bonds.

To ensure broad diversification in each asset class, all the ETFs underlying our model portfolios track broad-market or market-segment indexes. Each index is capitalization-weighted, meaning that its components reflect the makeup of the market or market segment it tracks. Employing an index approach also helps to keep costs low relative to the average actively managed investment strategy.

¹ A bond whose credit quality is considered to be among the highest by independent bond-rating agencies.












² As of December 31, 2019.

Core Series

Our most straightforward portfolios include broadly diversified domestic and international equity and fixed income Vanguard ETFs®. In addition, each portfolio features low costs and the potential for few capital gains.

Strategic asset allocation by product

As of December 31, 2019

Strategic asset allocation by product			Asset allocation (%) ¹										
			Equity / Fixed income										
As of December 31, 2019													
Vanguard ETF	Ticker	Expense ratio ²	0/100	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100/0
Domestic equity													
Total Stock Market	VTI	0.03%	0.0%	5.9%	11.8%	17.6%	23.5%	29.4%	35.3%	41.2%	47.0%	52.9%	58.8%
International equity													
Total International Stock	VXUS	0.09%	0.0%	3.9%	7.8%	11.8%	15.7%	19.6%	23.5%	27.4%	31.4%	35.3%	39.2%
Domestic fixed income													
Total Bond Market	BND	0.035%	68.6%	61.7%	54.9%	48.0%	41.2%	34.3%	27.4%	20.6%	13.7%	6.9%	0.0%
International fixed income													
Total International Bond	BNDX	0.09%	29.4%	26.5%	23.5%	20.6%	17.6%	14.7%	11.8%	8.8%	5.9%	2.9%	0.0%
Money market fund			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Weighted average expense ratio			0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%	0.05%

Model portfolio performance

Quarter	-0.34%	0.56%	1.46%	2.36%	3.28%	4.19%	5.12%	6.04%	6.98%	7.92%	8.86%
Year-to-date	8.34	10.14	11.94	13.75	15.56	17.39	19.22	21.05	22.87	24.71	26.55
1 year	8.34	10.14	11.94	13.75	15.56	17.39	19.22	21.05	22.87	24.71	26.55
3 year (annualized)	4.09	4.98	5.85	6.72	7.58	8.42	9.27	10.10	10.91	11.72	12.52
5 year (annualized)	3.20	3.83	4.44	5.04	5.63	6.20	6.77	7.32	7.85	8.37	8.88
10 year (annualized)	—	—	—	—	—	—	—	—	—	—	—
Since inception (annualized)	3.03	4.27	4.84	5.31	6.61	6.31	8.37	7.27	10.08	8.16	11.77
Inception date	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012

¹ Across asset groups, portfolio weights reflect a combination of market characteristics, Vanguard portfolio construction philosophy, and the availability of the ETFs in the Vanguard lineup. Within each asset group, the allocations reflect the market capitalizations of the ETFs' benchmarks. Because of rounding, weights may not add up to 100%. Note that some of the investable universe may be lost when moving from a broad ETF to a group of narrower ETFs.

² As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

Source: Vanguard calculations using data from FactSet.

The performance data shown represent past performance, which is not a guarantee of future results, and reflects the performance of the underlying products that comprise our strategies and our investment allocation methodology. Investment returns and principal value will fluctuate, so an investor's ETF shares, when sold, may be worth more or less than their original cost. Current performance may be higher or lower than the performance data cited. Performance of the model ETF components are based on net asset value (NAV) return and assumes a semiannual rebalance from January 2010 through December 2012, a quarterly rebalance from January 2013 through December 2013, and a monthly rebalance thereafter. Performance figures assume the reinvestment of dividends and capital gains distributions; the figures are pre-tax and net of expenses. All figures are for periods ended December 31, 2019, except where noted. Performance figures for periods of less than one year are cumulative returns.

CRSP Series

The CRSP series of Vanguard ETF strategic model portfolios offers highly diversified, balanced investment options, distinguished by their tracking of broad-market domestic stock indexes from the University of Chicago's Center for Research in Security Prices (CRSP).

Strategic asset allocation by product

As of December 31, 2019

			Asset allocation (%) ¹										Equity / Fixed income
Vanguard ETF	Ticker	Expense ratio ²	0/100	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100/0
Domestic equity													
Growth	VUG	0.04%	0.0%	2.6%	5.1%	7.7%	10.2%	12.8%	15.3%	17.9%	20.4%	23.0%	25.5%
Value	VTV	0.04	0.0	2.6	5.2	7.8	10.4	13.0	15.6	18.2	20.8	23.5	26.1
Small-Cap	VB	0.05	0.0	0.7	1.5	2.1	2.9	3.6	4.4	5.1	5.8	6.4	7.2
International equity													
FTSE Developed Markets	VEA	0.05%	0.0%	3.0%	6.0%	9.0%	11.9%	14.9%	17.9%	20.9%	23.9%	26.9%	29.9%
FTSE Emerging Markets	VWO	0.12	0.0	0.9	1.8	2.8	3.8	4.7	5.6	6.5	7.5	8.4	9.3
Domestic fixed income													
Short-Term Bond	BSV	0.07%	26.0%	23.4%	20.8%	18.2%	15.6%	13.0%	10.4%	7.8%	5.2%	2.6%	0.0%
Inter-Term Bond	BIV	0.07	13.6	12.2	10.8	9.5	8.1	6.8	5.4	4.1	2.7	1.4	0.0
Long-Term Bond	BLV	0.07	13.4	12.0	10.8	9.4	8.1	6.7	5.4	4.0	2.7	1.3	0.0
Mortgage-Backed Sec	VMBS	0.05	15.6	14.1	12.5	10.9	9.4	7.8	6.2	4.7	3.1	1.6	0.0
International fixed income													
Total International Bond	BNDX	0.09%	29.4%	26.5%	23.5%	20.6%	17.6%	14.7%	11.8%	8.8%	5.9%	2.9%	0.0%
Money market fund			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Weighted average expense ratio			0.07%	0.07%	0.07%	0.07%	0.06%	0.06%	0.06%	0.06%	0.05%	0.05%	0.05%

Model portfolio performance

Quarter	-0.33%	0.56%	1.46%	2.36%	3.27%	4.18%	5.10%	6.02%	6.95%	7.88%	8.82%
Year-to-date	8.36	10.16	11.98	13.79	15.62	17.45	19.28	21.12	22.94	24.81	26.64
1 year	8.36	10.16	11.98	13.79	15.62	17.45	19.28	21.12	22.94	24.81	26.64
3 year (annualized)	4.09	4.98	5.85	6.72	7.59	8.44	9.28	10.12	10.94	11.75	12.56
5 year (annualized)	3.20	3.83	4.45	5.05	5.65	6.23	6.80	7.36	7.89	8.43	8.95
10 year (annualized)	3.79	—	5.26	—	6.67	—	8.02	—	9.31	—	10.54
Since inception (annualized)	3.79	4.28	5.26	5.33	6.67	6.34	8.02	9.24	9.31	8.20	10.54
Inception date	1/1/2010	1/1/2014	1/1/2010	1/1/2014	1/1/2010	1/1/2014	1/1/2010	1/1/2012	1/1/2010	1/1/2014	1/1/2010

¹ Across asset groups, portfolio weights reflect a combination of market characteristics, Vanguard portfolio construction philosophy, and the availability of the ETFs in the Vanguard lineup. Within each asset group, the allocations reflect the market capitalizations of the ETFs' benchmarks. Because of rounding, weights may not add up to 100%. Note that some of the investable universe may be lost when moving from a broad ETF to a group of narrower ETFs.

² As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

Source: Vanguard calculations using data from FactSet.

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S&P Series

The S&P series of Vanguard ETF strategic model portfolios offers highly diversified, balanced investment options, distinguished by their tracking of broad-market domestic stock indexes from Standard & Poor's (S&P).

Strategic asset allocation by product

As of December 31, 2019

			Asset allocation (%) ¹										Equity / Fixed income
Vanguard ETF	Ticker	Expense ratio ²	0/100	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100/0
Domestic equity													
S&P 500	VOO	0.03%	0.0%	4.9%	9.8%	14.8%	19.7%	24.6%	29.5%	34.5%	39.4%	44.3%	49.2%
Extended Market	VXF	0.07	0.0	1.0	2.0	2.8	3.8	4.8	5.8	6.7	7.6	8.6	9.6
International equity													
FTSE Developed Markets	VEA	0.05%	0.0%	3.0%	6.0%	9.0%	11.9%	14.9%	17.9%	20.9%	23.9%	26.9%	29.9%
FTSE Emerging Markets	VWO	0.12	0.0	0.9	1.8	2.8	3.8	4.7	5.6	6.5	7.5	8.4	9.3
Domestic fixed income													
Short-Term Bond	BSV	0.07%	26.0%	23.4%	20.8%	18.2%	15.6%	13.0%	10.4%	7.8%	5.2%	2.6%	0.0%
Inter-Term Bond	BIV	0.07	13.6	12.2	10.8	9.5	8.1	6.8	5.4	4.1	2.7	1.4	0.0
Long-Term Bond	BLV	0.07	13.4	12.0	10.8	9.4	8.1	6.7	5.4	4.0	2.7	1.3	0.0
Mortgage-Backed Sec	VMBS	0.05	15.6	14.1	12.5	10.9	9.4	7.8	6.2	4.7	3.1	1.6	0.0
International fixed income													
Total International Bond	BNDX	0.09%	29.4%	26.5%	23.5%	20.6%	17.6%	14.7%	11.8%	8.8%	5.9%	2.9%	0.0%
Money market fund			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%
Weighted average expense ratio			0.07%	0.07%	0.07%	0.06%	0.06%	0.06%	0.06%	0.05%	0.05%	0.05%	0.05%

Model portfolio performance

Quarter	-0.33%	0.57%	1.47%	2.37%	3.29%	4.20%	5.13%	6.05%	6.99%	7.92%	8.87%
Year-to-date	8.36	10.17	11.97	13.79	15.62	17.46	19.28	21.13	22.95	24.82	26.65
1 year	8.36	10.17	11.97	13.79	15.62	17.46	19.28	21.13	22.95	24.82	26.65
3 year (annualized)	4.09	4.97	5.84	6.70	7.56	8.41	9.24	10.07	10.87	11.69	12.48
5 year (annualized)	3.20	3.82	4.44	5.05	5.64	6.22	6.79	7.34	7.87	8.41	8.93
10 year (annualized)	—	—	—	—	—	—	—	—	—	—	—
Since inception (annualized)	3.03	4.27	4.84	5.32	6.63	6.32	8.38	7.26	10.11	8.16	11.81
Inception date	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012

¹ Across asset groups, portfolio weights reflect a combination of market characteristics, Vanguard portfolio construction philosophy, and the availability of the ETFs in the Vanguard lineup. Within each asset group, the allocations reflect the market capitalizations of the ETFs' benchmarks. Because of rounding, weights may not add up to 100%. Note that some of the investable universe may be lost when moving from a broad ETF to a group of narrower ETFs.

² As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

Source: Vanguard calculations using data from FactSet.












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Russell Series

The Russell series of Vanguard ETF strategic model portfolios offers highly diversified, balanced investment options, distinguished by their tracking of broad-market domestic stock indexes from Russell Investments.

Strategic asset allocation by product

As of December 31, 2019

Strategic asset allocation by product			Asset allocation (%) ¹										Equity / Fixed income	
														
As of December 31, 2019														
Vanguard ETF	Ticker	Expense ratio ²	0/100	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100/0	
Domestic equity														
Russell 1000 Growth	VONG	0.08%	0.0%	2.8%	5.7%	8.5%	11.3%	14.1%	17.0%	19.8%	22.6%	25.5%	28.3%	
Russell 1000 Value	VONV	0.08	0.0	2.7	5.3	8.0	10.7	13.3	16.0	18.7	21.3	24.0	26.6	
Russell 2000	VTWO	0.10	0.0	0.4	0.8	1.1	1.5	2.0	2.3	2.7	3.1	3.4	3.9	
International equity														
FTSE Developed Markets	VEA	0.05%	0.0%	3.0%	6.0%	9.0%	11.9%	14.9%	17.9%	20.9%	23.9%	26.9%	29.9%	
FTSE Emerging Markets	VWO	0.12	0.0	0.9	1.8	2.8	3.8	4.7	5.6	6.5	7.5	8.4	9.3	
Domestic fixed income														
Short-Term Bond	BSV	0.07%	26.0%	23.4%	20.8%	18.2%	15.6%	13.0%	10.4%	7.8%	5.2%	2.6%	0.0%	
Inter-Term Bond	BIV	0.07	13.6	12.2	10.8	9.5	8.1	6.8	5.4	4.1	2.7	1.4	0.0	
Long-Term Bond	BLV	0.07	13.4	12.0	10.8	9.4	8.1	6.7	5.4	4.0	2.7	1.3	0.0	
Mortgage-Backed Sec	VMBS	0.05	15.6	14.1	12.5	10.9	9.4	7.8	6.2	4.7	3.1	1.6	0.0	
International fixed income														
Total International Bond	BNDX	0.09%	29.4%	26.5%	23.5%	20.6%	17.6%	14.7%	11.8%	8.8%	5.9%	2.9%	0.0%	
Money market fund			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Weighted average expense ratio			0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	0.07%	

Model portfolio performance

Quarter	-0.33%	0.57%	1.47%	2.38%	3.30%	4.22%	5.14%	6.07%	7.00%	7.95%	8.89%
Year-to-date	8.36	10.17	11.98	13.81	15.64	17.47	19.31	21.16	22.98	24.86	26.69
1 year	8.36	10.17	11.98	13.81	15.64	17.47	19.31	21.16	22.98	24.86	26.69
3 year (annualized)	4.09	4.97	5.84	6.69	7.55	8.39	9.23	10.05	10.86	11.67	12.45
5 year (annualized)	3.20	3.82	4.44	5.03	5.63	6.20	6.77	7.31	7.84	8.37	8.88
10 year (annualized)	—	—	—	—	—	—	—	—	—	—	—
Since inception (annualized)	3.03	4.27	4.83	5.30	6.61	6.30	8.35	7.24	10.07	8.13	11.75
Inception date	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012	1/1/2014	1/1/2012

¹ Across asset groups, portfolio weights reflect a combination of market characteristics, Vanguard portfolio construction philosophy, and the availability of the ETFs in the Vanguard lineup. Within each asset group, the allocations reflect the market capitalizations of the ETFs' benchmarks. Because of rounding, weights may not add up to 100%. Note that some of the investable universe may be lost when moving from a broad ETF to a group of narrower ETFs.

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Source: Vanguard calculations using data from FactSet.












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Income Series

The Income series of Vanguard ETF strategic model portfolios offers highly diversified, balanced investment options, distinguished by their broad market core portfolio and strategic tilt designed to generate risk controlled income.

Strategic asset allocation by product

As of December 31, 2019

Strategic asset allocation by product			Asset allocation (%) ¹										■ Equity / ■ Fixed income	
														
As of December 31, 2019														
Vanguard ETF	Ticker	Expense ratio ²	0/100	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10	100/0	
Domestic equity														
Total Stock Market	VTI	0.03%	0.0%	1.5%	3.0%	4.4%	5.9%	7.3%	8.8%	10.3%	11.7%	13.2%	14.7%	
High Dividend Yield	VYM	0.06%	0.0	4.4	8.8	13.2	17.6	22.1	26.5	30.9	35.3	39.7	44.1	
International equity														
Total International Stock	VXUS	0.09%	0.0%	1.0%	1.9%	3.0%	3.9%	4.9%	5.9%	6.8%	7.9%	8.8%	9.8%	
International High Dividend Yield	VYMI	0.32%	0.0	2.9	5.9	8.8	11.8	14.7	17.6	20.6	23.5	26.5	29.4	
Domestic fixed income														
Total Bond Market	BND	0.035%	17.1%	15.4%	13.7%	12.0%	10.3%	8.6%	6.8%	5.2%	3.4%	1.8%	0.0%	
Total Corporate Bond	VTC	0.05%	51.5	46.3	41.2	36.0	30.9	25.7	20.6	15.4	10.3	5.1	0.0	
International fixed income														
Total International Bond	BNDX	0.09%	29.4%	26.5%	23.5%	20.6%	17.6%	14.7%	11.8%	8.8%	5.9%	2.9%	0.0%	
Money market fund			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	
Weighted average expense ratio			0.06%	0.07%	0.07%	0.08%	0.09%	0.10%	0.10%	0.11%	0.12%	0.13%	0.13%	

Model portfolio performance

Quarter	0.26%	0.98%	1.70%	2.42%	3.15%	3.87%	4.61%	5.34%	6.08%	6.82%	7.57%
Year-to-date	11.28	12.46	13.64	14.80	15.96	17.11	18.25	19.38	20.50	21.61	22.71
1 year	11.28	12.46	13.64	14.80	15.96	17.11	18.25	19.38	20.50	21.61	22.71
3 year (annualized)	—	—	—	—	—	—	—	—	—	—	—
5 year (annualized)	—	—	—	—	—	—	—	—	—	—	—
10 year (annualized)	—	—	—	—	—	—	—	—	—	—	—
Since inception (annualized)	5.29	5.45	5.59	5.71	5.82	5.90	5.97	6.03	6.05	6.07	6.07
Inception date	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018	1/1/2018

¹ Across asset groups, portfolio weights reflect a combination of market characteristics, Vanguard portfolio construction philosophy, and the availability of the ETFs in the Vanguard lineup. Within each asset group, the allocations reflect the market capitalizations of the ETFs' benchmarks. Because of rounding, weights may not add up to 100%. Note that some of the investable universe may be lost when moving from a broad ETF to a group of narrower ETFs.










² As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

Source: Vanguard calculations using data from FactSet.

The performance data shown represent past performance, which is not a guarantee of future results, and reflects the performance of the underlying products that comprise our strategies and our investment allocation methodology. Investment returns and principal value will fluctuate, so an investor's ETF shares, when sold, may be worth more or less than their original cost. Current performance may be higher or lower than the performance data cited. Performance of the model ETF components are based on net asset value (NAV) return and assumes a monthly rebalance. Performance figures assume the reinvestment of dividends and capital gains distributions; the figures are pre-tax and net of expenses. All figures are for periods ended December 31, 2019, except where noted. Performance figures for periods of less than one year are cumulative returns.

Tax-Efficient Series

The Tax-efficient series of Vanguard ETF strategic model portfolios offers highly diversified, balanced investment options, distinguished by an index-centric framework that leverages municipal bonds to help increase tax-efficiency.

Strategic asset allocation by product			Asset allocation (%) ¹									■ Equity / ■ Fixed income	
													
Vanguard ETF	Ticker	Expense ratio ²	10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10		
Domestic equity													
Growth	VUG	0.04%	2.6%	5.1%	7.7%	10.2%	12.8%	15.3%	17.9%	20.4%	23.0%		
Value	VTV	0.04	2.6	5.2	7.8	10.4	13.0	15.6	18.2	20.8	23.5		
Small-Cap	VB	0.05	0.7	1.5	2.1	2.9	3.6	4.4	5.1	5.8	6.4		
International equity													
FTSE Developed Markets	VEA	0.05%	3.0%	6.0%	9.0%	11.9%	14.9%	17.9%	20.9%	23.9%	26.9%		
FTSE Emerging Markets	VWO	0.12	0.9	1.8	2.8	3.8	4.7	5.6	6.5	7.5	8.4		
Domestic fixed income													
Tax-Exempt Bond	VTEB	0.08%	88.2%	78.4%	68.6%	58.8%	49.0%	39.2%	29.4%	19.6%	9.8%		
Money market fund			2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%	2.0%		
Weighted average expense ratio			0.08%	0.07%	0.07%	0.07%	0.06%	0.06%	0.06%	0.06%	0.05%		
Model portfolio performance			10/90	20/80	30/70	40/60	50/50	60/40	70/30	80/20	90/10		
Quarter	Pre-tax		1.41%	2.22%	3.03%	3.84%	4.66%	5.49%	6.31%	7.15%	7.98%		
	After-tax		1.39	2.18	2.97	3.76	4.56	5.36	6.17	6.98	7.79		
Year-to-date	Pre-tax		9.27	11.17	13.07	14.98	16.91	18.84	20.78	22.72	24.68		
	After-tax		9.20	11.03	12.85	14.69	16.54	18.40	20.26	22.11	23.99		
1 year	Pre-tax		9.27	11.17	13.07	14.98	16.91	18.84	20.78	22.72	24.68		
	After-tax		9.20	11.03	12.85	14.69	16.54	18.40	20.26	22.11	23.99		
3 year (annualized)	Pre-tax		5.23	6.08	6.92	7.76	8.58	9.40	10.20	10.99	11.78		
	After-tax		5.17	5.96	6.74	7.51	8.27	9.02	9.76	10.49	11.20		
5 year (annualized)	Pre-tax		—	—	—	—	—	—	—	—	—		
	After-tax		—	—	—	—	—	—	—	—	—		
10 year (annualized)	Pre-tax		—	—	—	—	—	—	—	—	—		
	After-tax		—	—	—	—	—	—	—	—	—		
Since inception	Pre-tax		4.22	5.08	5.93	6.77	7.61	8.45	9.26	10.07	10.87		
	After-tax		4.16	4.96	5.75	6.53	7.30	8.07	8.82	9.56	10.30		
Inception date			1/1/2016	1/1/2016	1/1/2016	1/1/2016	1/1/2016	1/1/2016	1/1/2016	1/1/2016	1/1/2016		

1 Across asset groups, portfolio weights reflect a combination of market characteristics, Vanguard portfolio construction philosophy, and the availability of the ETFs in the Vanguard lineup. Within each asset group, the allocations reflect the market capitalizations of the ETFs' benchmarks. Because of rounding, weights may not add up to 100%. Note that some of the investable universe may be lost when moving from a broad ETF to a group of narrower ETFs.

2 As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

Source: Vanguard calculations using data from FactSet.

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Underlying funds

Underlying fund performance

As of December 31, 2019

Vanguard ETF	Ticker	Expense ratio ¹		Quarter	Year-to-date	1 year	Annualized				Inception date
							3 year	5 year	10 year	Since inception	
Total Stock Market	VTI	0.03%	NAV	9.01%	30.80%	30.80%	14.56%	11.21%	13.43%	7.61%	5/24/2001
			Market price	8.97	30.80	30.80	14.54	11.20	13.42	7.61	
Growth	VUG	0.04%	NAV	9.90	37.26	37.26	19.25	13.21	14.59	9.70	1/26/2004
			Market price	9.86	37.26	37.26	19.22	13.20	14.59	9.70	
Value	VTV	0.04%	NAV	8.25	25.85	25.85	11.72	10.07	12.49	8.45	1/26/2004
			Market price	8.22	25.83	25.83	11.70	10.06	12.48	8.45	
S&P 500	VOO	0.03%	NAV	9.06	31.46	31.46	15.23	11.66	—	14.68	9/7/2010
			Market price	9.03	31.47	31.47	15.20	11.66	—	14.68	
Small-Cap	VB	0.05%	NAV	8.14	27.37	27.37	10.32	8.89	12.81	9.28	1/26/2004
			Market price	8.16	27.44	27.44	10.31	8.88	12.82	9.28	
High Dividend Yield	VYM	0.06%	NAV	6.54	24.20	24.20	10.82	9.80	12.86	8.19	11/10/2006
			Market price	6.50	24.18	24.18	10.80	9.79	12.85	8.18	
Extended Market	VXF	0.07%	NAV	8.89	28.04	28.04	11.08	9.02	12.81	9.60	12/27/2001
			Market price	8.90	28.06	28.06	11.06	9.02	12.81	9.60	
Russell 1000 Growth	VONG	0.08%	NAV	10.59	36.29	36.29	20.37	14.51	—	15.91	9/20/2010
			Market price	10.58	36.33	36.33	20.34	14.50	—	15.91	
Russell 1000 Value	VONV	0.08%	NAV	7.39	26.50	26.50	9.61	8.17	—	12.02	9/20/2010
			Market price	7.35	26.51	26.51	9.58	8.16	—	12.02	
Russell 2000	VTWO	0.10%	NAV	9.95	25.61	25.61	8.65	8.26	—	11.86	9/20/2010
			Market price	9.93	25.63	25.63	8.60	8.26	—	11.86	
Total International Stock	VXUS	0.09%	NAV	9.05	21.58	21.58	9.88	5.87	—	4.29	1/26/2011
			Market price	9.03	21.84	21.84	9.92	5.93	—	4.31	
FTSE Developed Markets	VEA	0.05%	NAV	8.35	22.08	22.08	9.70	6.19	5.75	2.08	7/20/2007
			Market price	8.31	22.60	22.60	9.73	6.21	5.72	2.07	

¹ As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

The performance data shown represent past performance, which is not a guarantee of future results. Investment returns and principal value will fluctuate, so investors' ETF 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 vanguard.com/performance.

Note: The model portfolio performance data referenced in each of the series on the previous pages are calculated by obtaining the weighted monthly returns of the strategy component holdings for each period and is based upon the historical asset allocations at the beginning of each month during the periods shown, which may differ from the current allocation. The holdings comprising the strategies and the allocations to those holdings have changed over time and may change in the future. The historical model performance has not been adjusted to reflect current allocations. Model performance does not reflect any transaction costs that an investor may incur in implementing the models.

Underlying funds *(continued)*

Underlying fund performance

As of December 31, 2019

Underlying fund performance							Annualized				Inception date
As of December 31, 2019											
Vanguard ETF	Ticker	Expense ratio ¹		Quarter	Year-to-date	1 year	3 year	5 year	10 year	Since inception	
FTSE Emerging Markets	VWO	0.12%	NAV	11.31%	20.40%	20.40%	10.56%	5.03%	3.46%	6.55%	3/4/2005
			Market price	11.93	20.77	20.77	10.64	5.06	3.47	6.56	
International High Dividend Yield	VYMI	0.32%	NAV	8.37	18.31	18.31	8.25	—	—	10.50	2/25/2016
			Market price	8.42	18.68	18.68	8.24	—	—	10.57	
FTSE AW ex-US Small-Cap ²	VSS	0.12%	NAV	10.98	21.73	21.73	8.96	6.14	6.22	10.39	4/2/2009
			Market price	11.04	21.38	21.38	8.94	6.13	6.16	10.37	
Total Bond Market	BND	0.035%	NAV	0.04	8.71	8.71	4.04	3.00	3.68	4.19	4/3/2007
			Market price	0.20	8.82	8.82	4.03	3.01	3.66	4.20	
Total Corporate Bond	VTC	0.05%	NAV	1.21	14.50	14.50	—	—	—	5.53	11/7/2017
			Market price	1.24	14.61	14.61	—	—	—	5.55	
Short-Term Bond	BSV	0.07%	NAV	0.44	4.92	4.92	2.47	1.95	2.03	2.80	4/3/2007
			Market price	0.50	4.94	4.94	2.47	1.94	2.01	2.81	
Inter-Term Bond	BIV	0.07%	NAV	−0.01	10.19	10.19	4.55	3.54	4.77	5.16	4/3/2007
			Market price	0.05	10.34	10.34	4.49	3.50	4.75	5.16	
Long-Term Bond	BLV	0.07%	NAV	−1.36	19.09	19.09	8.05	5.35	7.55	7.19	4/3/2007
			Market price	−1.09	18.98	18.98	8.06	5.30	7.56	7.21	
Mortgage-Back Sec	VMBS	0.05%	NAV	0.71	6.17	6.17	3.11	2.44	3.01	2.92	11/19/2009
			Market price	0.67	6.17	6.17	3.15	2.44	3.03	2.92	
Tax-Exempt Bond	VTEB	0.08%	NAV	0.62	7.50	7.50	4.43	—	—	3.62	8/21/2015
			Market price	0.62	7.35	7.35	4.40	—	—	3.65	
Total International Bond	BNDX	0.09%	NAV	−1.27	7.88	7.88	4.38	3.77	—	4.16	5/31/2013
			Market price	−1.22	7.91	7.91	4.34	3.75	—	4.19	
Money market fund ³				0.46	2.25	2.25	1.65	1.04	0.55	—	

¹ As reported in each ETF's most recent prospectus as of December 31, 2019. The current expense ratio may be higher or lower than the figure shown.

² Vanguard FTSE All-World ex-US Small-Cap ETF (VSS) was removed from the CRSP, Russell, and S&P series of the model portfolios effective December 31, 2015. The performance of VSS through that date is embedded in historical model portfolio performance.

³ The FTSE 3-Month U.S. Treasury Bill Index is used to represent performance of a money market fund. The model performance does not include performance of any specific money market fund.

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Whether your objective is to generate income or long-term growth, to achieve greater diversification, or to limit portfolio volatility, an investment in a Vanguard ETF strategic model portfolio can be a good choice.

Before investing, you should understand your objectives and time horizon. You also should understand the risks and your tolerance for those risks.

Your financial advisor can help you answer the critical questions that will lead to a model portfolio designed to meet your needs. Talk to your advisor today and put your investment program on a solid foundation for years to come.

Important after-tax performance information

Vanguard after-tax returns

After-tax returns are calculated using the highest individual federal income tax rates in effect at the time of each distribution. They do not reflect the impact of state and local taxes. You also should know that:

- Your after-tax return depends on your individual tax situation and may differ from the figures presented here.
- If you own fund or exchange-traded fund (ETF) shares in a tax-deferred account such as an IRA or 401(k) plan, this information does not apply to your investment because these accounts are not subject to current taxes.
- After-tax returns for Vanguard funds and ETFs reflect the reduced tax rates on ordinary income, qualified dividend income, and short-term and long-term capital gains that went into effect in 2003.
- After-tax returns for non-Vanguard funds and ETFs are provided by Morningstar, Inc., based on data provided by the fund companies. Recent changes in tax law may cause after-tax returns to be calculated inconsistently across different fund families. Accordingly, after-tax returns for peer groups have been removed.
- Past performance, whether before or after taxes, does not guarantee future results.
- If a fund or ETF incurs a loss that generates a tax benefit, the post-liquidation after-tax return may exceed the fund's or ETF's other return figures.
- After-tax returns are quarter-end adjusted for fees and loads, if applicable.

After-tax returns for most funds and ETFs are calculated using the tax liability implied by each fund's or ETF's declared distribution. However, the exact tax characteristics of many distributions are not known until after the close of the calendar year.



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For more information about Vanguard funds or Vanguard ETFs, contact your financial advisor to obtain a prospectus or, if available, a summary prospectus. Investment objectives, risks, charges, expenses, and other important information are contained in the prospectus; read and consider it carefully before investing.

Vanguard ETF Shares are not redeemable with the issuing Fund other than in very large aggregations worth millions of dollars. Instead, investors must buy and sell Vanguard ETF Shares in the secondary market and hold those shares in a brokerage account. In doing so, the investor may incur brokerage commissions and may pay more than net asset value when buying and receive less than net asset value when selling.

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It is possible that the funds will not meet their objective of being tax-efficient.

Although the income from municipal bonds held by a fund is exempt from federal tax, you may owe taxes on any capital gains realized through the fund's trading or through your own redemption of shares. For some investors, a portion of the fund's income may be subject to state and local taxes, as well as to the federal Alternative Minimum Tax.

Please remember that all investments involve some risk. Be aware that fluctuations in the financial markets and other factors may cause declines in the value of your account. 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. Prices of mid- and small-cap stocks often fluctuate more than those of large-company

stocks. Investments in stocks or bonds issued by non-U.S. companies are subject to risks including country/regional risk and currency risk. 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.

Investors cannot invest directly in an index. Diversification does not ensure a profit or protect against a loss.

Model portfolio performance data are calculated by obtaining the weighted monthly returns of the strategy component holdings for each period and are based on the historical asset allocations at the beginning of each month during the periods shown, which may differ from the current allocation. The holdings making up the strategies and the allocations to those holdings have changed over time and may change in the future. The historical model performance has not been adjusted to reflect current fund allocations. Model performance does not reflect any transaction costs that an investor may incur in implementing the models.

All model portfolio performance results are composite returns showing total returns that are calculated assuming reinvestment of dividends, income, and capital appreciation. While the managers believe this performance accurately reflects the past performance of their investment strategy, past performance is no guarantee of future results.

Vanguard does not, and will not, make any representations about the suitability of a model portfolio for any investor; is not, and will not be, responsible for the suitability of a model portfolio for any investor; and is not acting as an investment advisor to any investor.