

# **Vanir High Growth Portfolio**

# **Objective**

- + Vanir's High Growth portfolio aims to return superior risk-adjusted returns when compared to the S&P-500 (Ticker: SPY). The portfolio holds five ETFs that, all together, statistically outperform the market. Vanir uses a genetic algorithm to find the weights for these five securities. Vanir rebalances weights every three months to ensure our algorithm picks up trends in our five specified securities.

# Performance

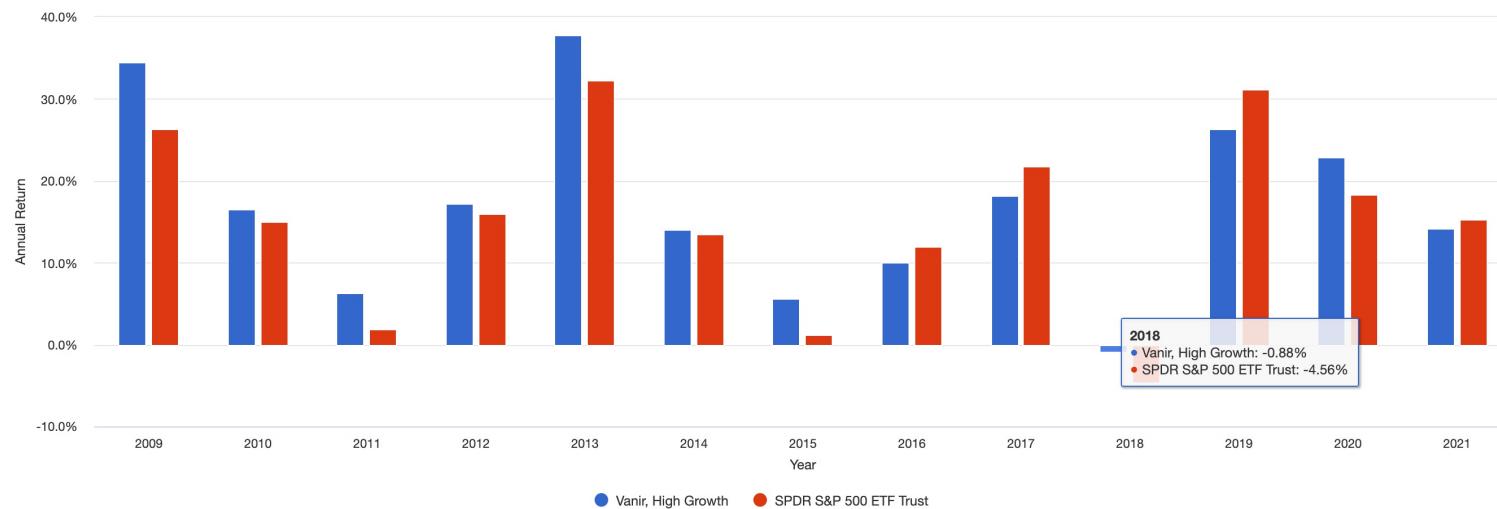
## Portfolio Returns

Portfolio	Initial Balance	Final Balance	CAGR	Stdev	Best Year	Worst Year	Max. Drawdown	Sharpe Ratio
Vanir, High Growth	\$1,000	\$7,392 ⓘ	17.36% ⓘ	14.22%	37.85%	-0.88%	-18.37% ⓘ	1.17
SPDR S&P 500 ETF Trust	\$1,000	\$6,082 ⓘ	15.54% ⓘ	14.60%	32.31%	-4.56%	-19.43% ⓘ	1.03

## Portfolio Growth



# Annual Returns



# Annual Returns Continued

Year	Inflation	Vanir, High Growth				SPDR S&P 500 ETF Trust	
		Return	Balance	Yield	Income	Return	Balance
2009	2.72%	34.42%	\$1,344	1.93%	\$19.31	26.36%	\$1,264
2010	1.50%	16.46%	\$1,565	1.62%	\$21.71	15.06%	\$1,454
2011	2.96%	6.29%	\$1,664	1.78%	\$27.90	1.89%	\$1,481
2012	1.74%	17.18%	\$1,950	2.27%	\$37.76	15.99%	\$1,718
2013	1.50%	37.85%	\$2,688	2.08%	\$40.56	32.31%	\$2,273
2014	0.76%	14.08%	\$3,066	2.47%	\$66.38	13.46%	\$2,579
2015	0.73%	5.56%	\$3,236	2.81%	\$86.21	1.25%	\$2,612
2016	2.07%	9.99%	\$3,560	1.81%	\$58.63	12.00%	\$2,925
2017	2.11%	18.14%	\$4,205	2.79%	\$99.23	21.70%	\$3,560
2018	1.91%	-0.88%	\$4,168	1.53%	\$64.16	-4.56%	\$3,398
2019	2.29%	26.28%	\$5,264	1.84%	\$76.57	31.22%	\$4,459
2020	1.36%	22.94%	\$6,471	1.24%	\$65.39	18.37%	\$5,278
2021	4.31%	14.23%	\$7,392	0.50%	\$32.37	15.25%	\$6,082

Annual return for 2021 is from 01/01/2021 to 06/30/2021

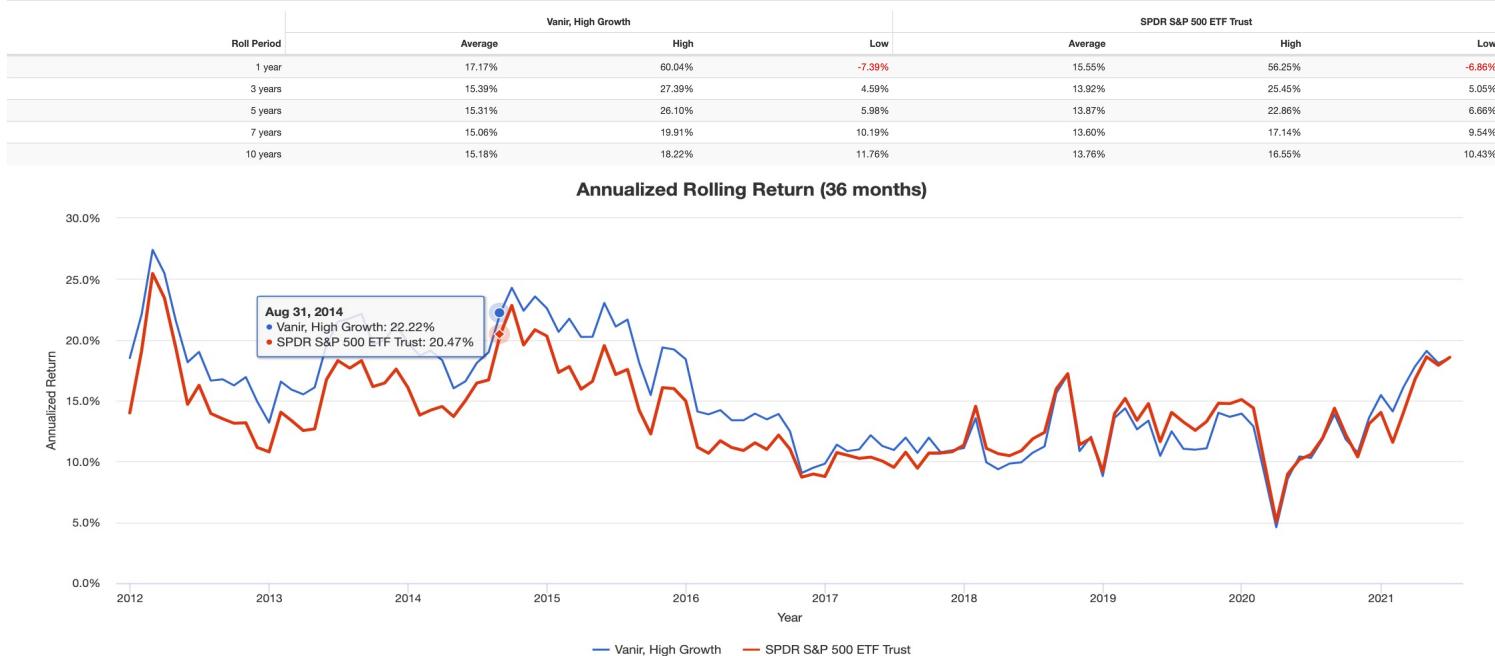
**"Income" denotes dividends earned from portfolio yield.**

# Portfolio Statistics

Metric	Vanir, High Growth	SPDR S&P 500 ETF Trust
Arithmetic Mean (monthly)	1.43%	1.30%
Arithmetic Mean (annualized)	18.52%	16.76%
Geometric Mean (monthly)	1.34%	1.21%
Geometric Mean (annualized)	17.36%	15.54%
Volatility (monthly)	4.11%	4.22%
Volatility (annualized)	14.22%	14.60%
Downside Deviation (monthly)	2.38%	2.56%
Max. Drawdown	-18.37%	-19.43%
US Market Correlation	0.97	1.00
Beta <sup>(1)</sup>	0.94	1.00
Alpha (annualized)	2.44%	-0.00%
R <sup>2</sup>	93.29%	100.00%
Sharpe Ratio	1.17	1.03
Sortino Ratio	1.99	1.69
Treynor Ratio (%)	17.66	15.09
Calmar Ratio	1.01	0.96
Active Return	1.82%	N/A
Tracking Error	3.79%	N/A
Information Ratio	0.48	N/A
Skewness	-0.32	-0.43
Excess Kurtosis	0.87	0.94
Historical Value-at-Risk (5%)	-5.93%	-6.67%
Analytical Value-at-Risk (5%)	-5.29%	-5.63%
Conditional Value-at-Risk (5%)	-8.12%	-8.74%
Upside Capture Ratio (%)	99.21	100.00
Downside Capture Ratio (%)	87.69	100.00
Safe Withdrawal Rate	19.72%	17.17%
Perpetual Withdrawal Rate	13.53%	12.11%
Positive Periods	106 out of 150 (70.67%)	105 out of 150 (70.00%)
Gain/Loss Ratio	1.01	0.93

<sup>(1)</sup> SPDR S&P 500 ETF Trust is used as the benchmark for calculations. Value-at-risk metrics are based on monthly values.

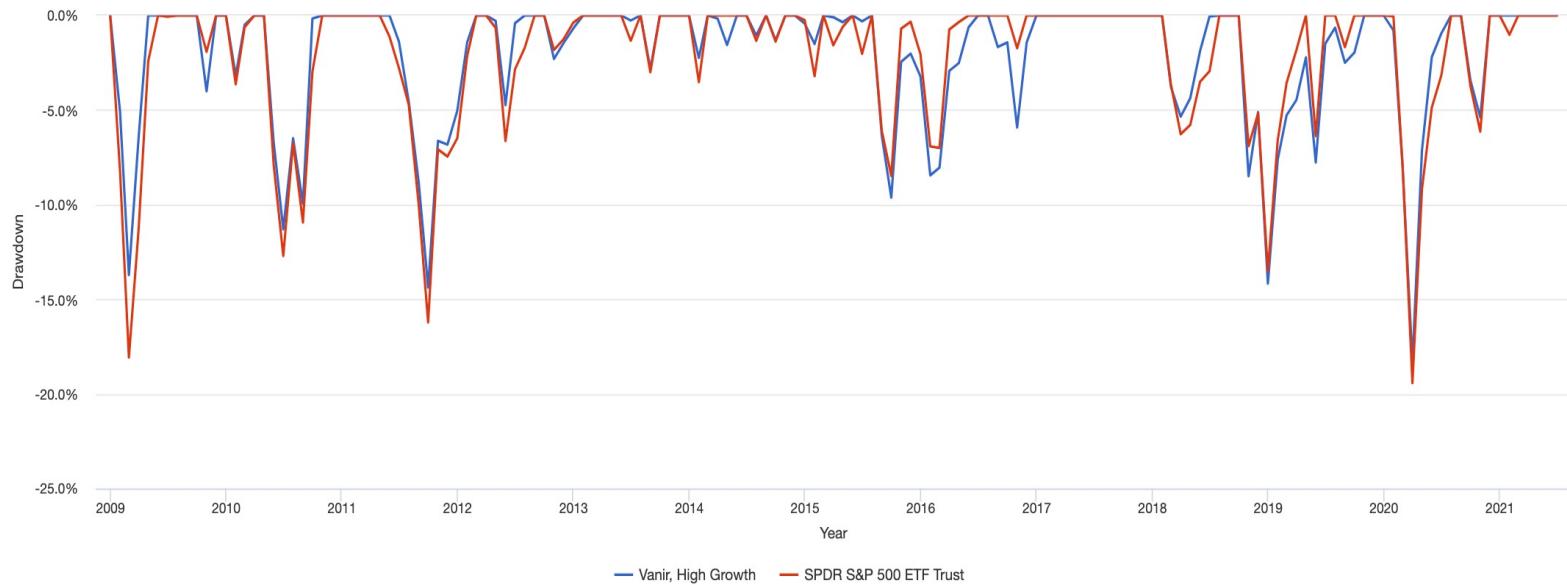
# Rolling Returns



# Rolling Returns Continued



# Drawdowns



# Drawdowns Continued

Drawdowns for Vanir, High Growth

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Jan 2020	Mar 2020	3 months	Jul 2020	4 months	7 months	-18.37%
2	Jun 2011	Sep 2011	4 months	Feb 2012	5 months	9 months	-14.38%
3	Oct 2018	Dec 2018	3 months	Oct 2019	10 months	1 year 1 month	-14.17%
4	Jan 2009	Feb 2009	2 months	Apr 2009	2 months	4 months	-13.72%
5	May 2010	Jun 2010	2 months	Oct 2010	4 months	6 months	-11.30%
6	Aug 2015	Sep 2015	2 months	Jun 2016	9 months	11 months	-9.63%
7	Aug 2016	Oct 2016	3 months	Dec 2016	2 months	5 months	-5.92%
8	Sep 2020	Oct 2020	2 months	Nov 2020	1 month	3 months	-5.38%
9	Feb 2018	Mar 2018	2 months	Jul 2018	4 months	6 months	-5.35%
10	Apr 2012	May 2012	2 months	Jul 2012	2 months	4 months	-4.74%

Worst 10 drawdowns included above

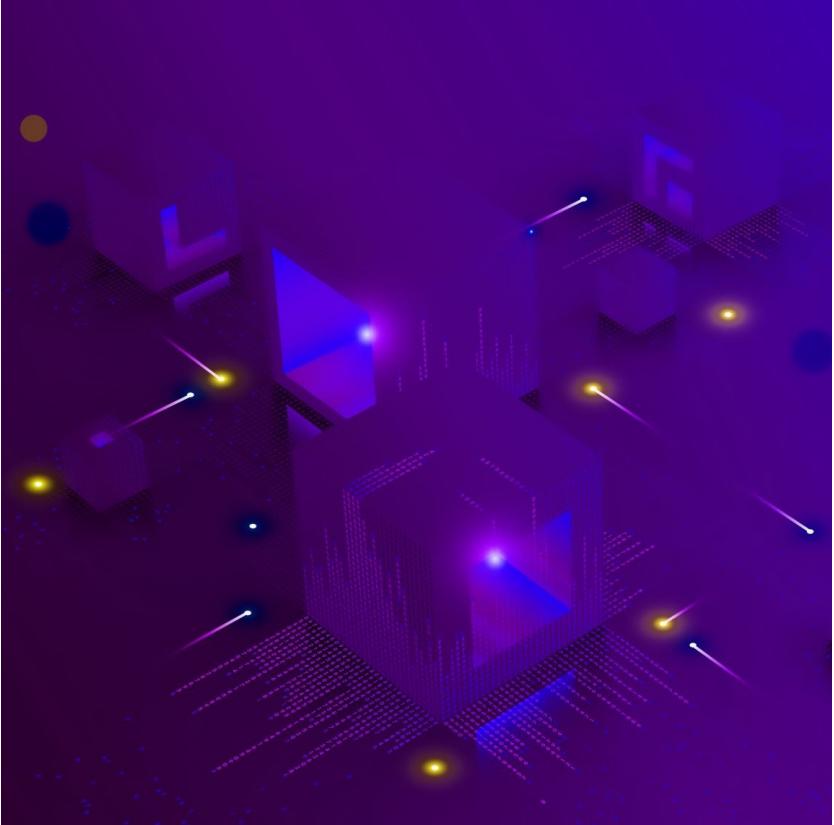
Drawdowns for SPDR S&P 500 ETF Trust

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Jan 2020	Mar 2020	3 months	Jul 2020	4 months	7 months	-19.43%
2	Jan 2009	Feb 2009	2 months	May 2009	3 months	5 months	-18.07%
3	May 2011	Sep 2011	5 months	Feb 2012	5 months	10 months	-16.23%
4	Oct 2018	Dec 2018	3 months	Apr 2019	4 months	7 months	-13.52%
5	May 2010	Jun 2010	2 months	Oct 2010	4 months	6 months	-12.71%
6	Aug 2015	Sep 2015	2 months	May 2016	8 months	10 months	-8.48%
7	Apr 2012	May 2012	2 months	Aug 2012	3 months	5 months	-6.63%
8	May 2019	May 2019	1 month	Jun 2019	1 month	2 months	-6.38%
9	Feb 2018	Mar 2018	2 months	Jul 2018	4 months	6 months	-6.28%
10	Sep 2020	Oct 2020	2 months	Nov 2020	1 month	3 months	-6.14%

Worst 10 drawdowns included above

Notes on results:

- Past performance is no guarantee of future results, which may vary. All use is subject to terms of service.
- Investing involves risk, including possible loss of principal. The value of the investments and the income derived from them may fluctuate over time.
- All portfolio returns presented are hypothetical and backtested. Hypothetical returns do not reflect trading costs, transaction fees, or taxes.
- The results do not constitute investment advice or recommendation, are provided solely for informational purposes, and are not an offer to buy or sell any securities.
- The results are based on the total return of assets and assume that all received dividends and distributions are reinvested.
- The annual results for 2021 are based on monthly returns from January to June
- CAGR = Compound Annual Growth Rate
- Stdev = Annualized standard deviation of monthly returns
- Sharpe and Sortino ratios are calculated and annualized from monthly excess returns over risk free rate (3-month treasury bill)
- Stock market correlation is based on the correlation of monthly returns
- Drawdown analysis is calculated based on monthly returns excluding cashflows
- The results assume annual rebalancing of portfolio assets to match the specified allocation
- The annual income is calculated from the difference between monthly total returns and split adjusted monthly price changes and thus includes both dividends and capital gains distributions.
- The annual yield as a percentage is based on the portfolio asset allocation and is not impacted by cashflows.



# **Vanir Moderate Portfolio**

# **Objective**

- + Vanir's Moderate portfolio aims to return superior risk-adjusted returns when compared to the traditional 60/40 portfolio. The portfolio holds eight ETFs (fixed income & equities) that, all together, statistically outperform the market. Vanir uses a genetic algorithm to find the weights for these eight securities. Vanir rebalances weights every three months to ensure our algorithm picks up trends in our eight specified securities.

# Performance

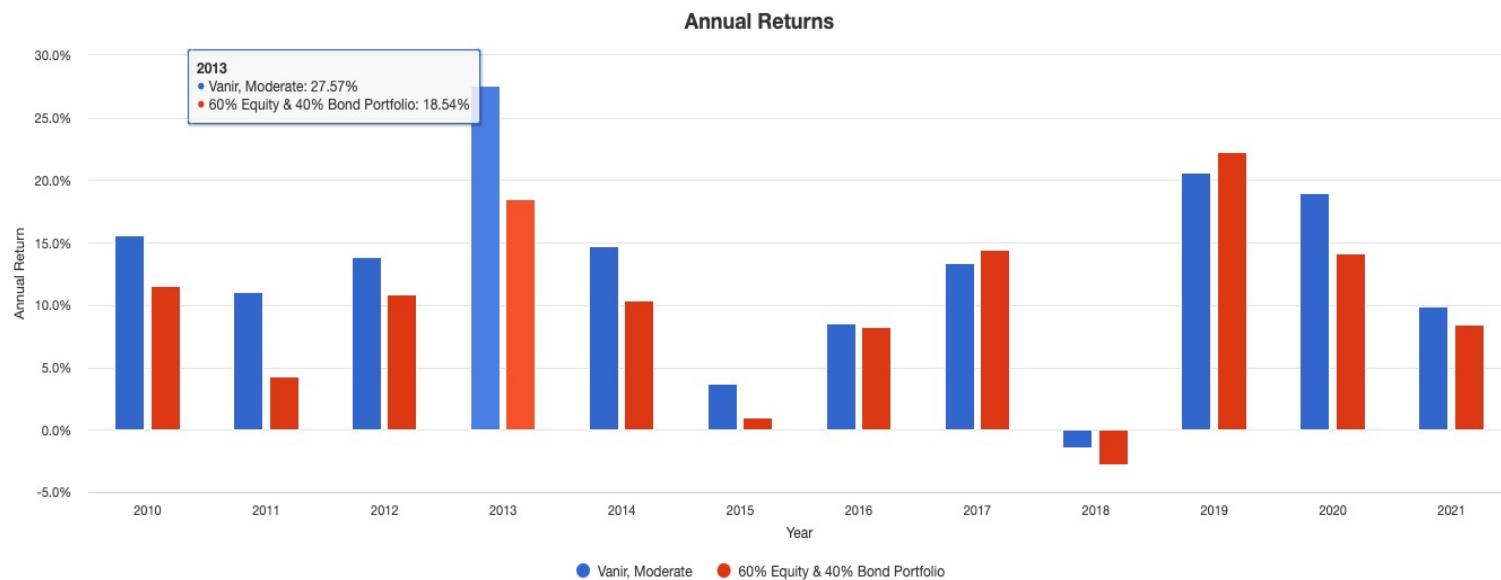
## Portfolio Returns

Portfolio	Initial Balance	Final Balance	CAGR	Stdev	Best Year	Worst Year	Max. Drawdown	Sharpe Ratio
Vanir, Moderate	\$1,000	\$4,245 ⓘ	13.40% ⓘ	9.75%	27.57%	-1.39%	-11.59% ⓘ	1.29
60% Equity & 40% Bond Portfolio	\$1,000	\$3,104 ⓘ	10.35% ⓘ	8.23%	22.27%	-2.78%	-11.46% ⓘ	1.18

## Portfolio Growth



# Annual Returns



# Annual Returns Continued

		Vanir, Moderate				60% Equity & 40% Bond Portfolio			
Year	Inflation	Return	Balance	Yield	Income	Return	Balance	Yield	Income
2010	1.50%	15.55%	\$1,155	2.22%	\$22.21	11.51%	\$1,115	2.86%	\$28.60
2011	2.96%	11.04%	\$1,283	2.30%	\$26.57	4.30%	\$1,163	2.75%	\$30.67
2012	1.74%	13.86%	\$1,461	2.39%	\$30.67	10.86%	\$1,289	2.53%	\$29.39
2013	1.50%	27.57%	\$1,864	2.21%	\$32.21	18.54%	\$1,528	2.50%	\$32.19
2014	0.76%	14.72%	\$2,138	2.77%	\$51.69	10.41%	\$1,688	2.42%	\$36.93
2015	0.73%	3.74%	\$2,218	3.00%	\$64.10	0.97%	\$1,704	2.26%	\$38.10
2016	2.07%	8.54%	\$2,407	1.96%	\$43.49	8.21%	\$1,844	2.36%	\$40.26
2017	2.11%	13.35%	\$2,729	2.98%	\$71.82	14.45%	\$2,110	2.34%	\$43.10
2018	1.91%	-1.39%	\$2,691	1.76%	\$47.95	-2.78%	\$2,052	2.26%	\$47.72
2019	2.29%	20.65%	\$3,246	1.99%	\$53.62	22.27%	\$2,508	2.52%	\$51.79
2020	1.36%	19.02%	\$3,864	1.33%	\$43.21	14.11%	\$2,862	2.08%	\$52.20
2021	4.31%	9.86%	\$4,245	0.51%	\$19.60	8.44%	\$3,104	0.76%	\$21.66

Annual return for 2021 is from 01/01/2021 to 06/30/2021

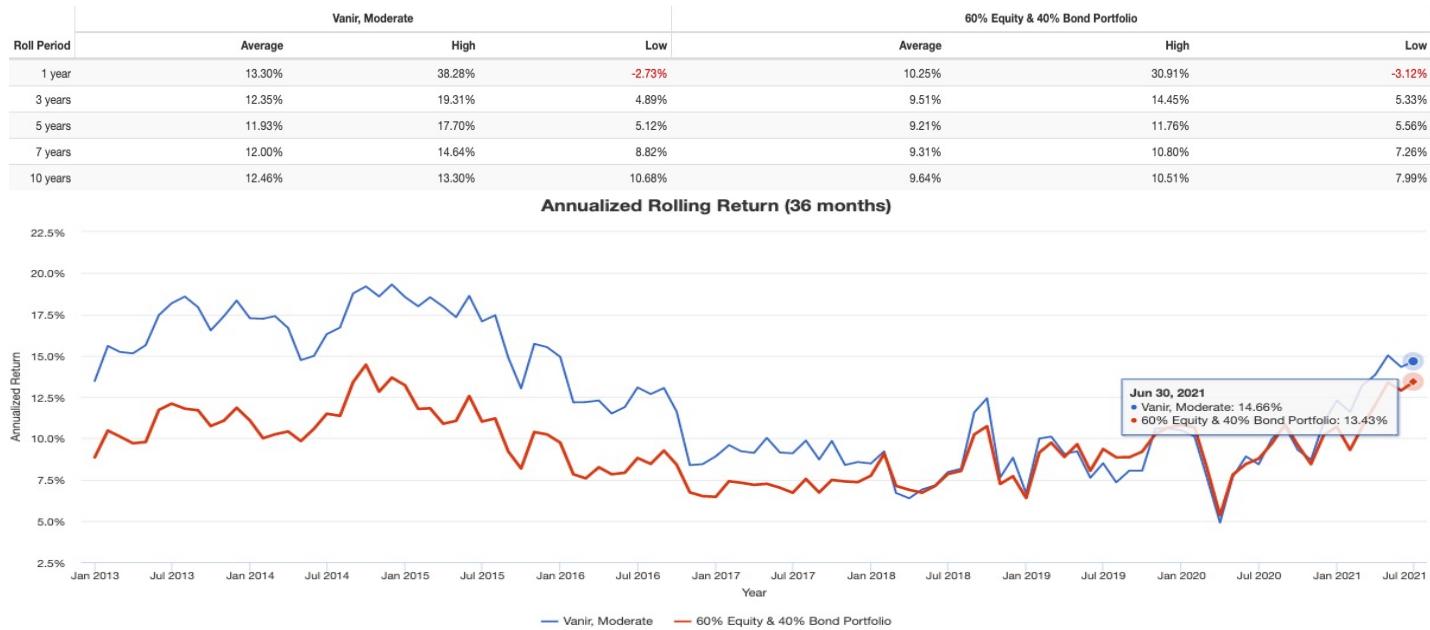
**"Income" denotes dividends earned from portfolio yield.**

# Portfolio Statistics

Metric	Vanir, Moderate	60% Equity & 40% Bond Portfolio
Arithmetic Mean (monthly)	1.09%	0.85%
Arithmetic Mean (annualized)	13.92%	10.72%
Geometric Mean (monthly)	1.05%	0.82%
Geometric Mean (annualized)	13.40%	10.35%
Volatility (monthly)	2.82%	2.38%
Volatility (annualized)	9.75%	8.23%
Downside Deviation (monthly)	1.57%	1.37%
Max. Drawdown	-11.59%	-11.46%
US Market Correlation	0.92	0.98
Beta <sup>(1)</sup>	0.62	0.56
Alpha (annualized)	3.87%	1.88%
R <sup>2</sup>	84.48%	96.91%
Sharpe Ratio	1.29	1.18
Sortino Ratio	2.27	2.01
Treynor Ratio (%)	20.22	17.24
Calmar Ratio	1.27	1.17
Active Return	-1.32%	-4.37%
Tracking Error	6.66%	6.47%
Information Ratio	-0.20	-0.68
Skewness	-0.28	-0.32
Excess Kurtosis	1.44	1.35
Historical Value-at-Risk (5%)	-3.88%	-3.45%
Analytical Value-at-Risk (5%)	-3.58%	-3.08%
Conditional Value-at-Risk (5%)	-5.74%	-4.73%
Upside Capture Ratio (%)	68.91	59.12
Downside Capture Ratio (%)	52.26	53.92
Safe Withdrawal Rate	16.68%	13.82%
Perpetual Withdrawal Rate	10.46%	7.88%
Positive Periods	98 out of 138 (71.01%)	96 out of 138 (69.57%)
Gain/Loss Ratio	1.12	1.10

<sup>(1)</sup> US stock market is used as the benchmark for calculations. Value-at-risk metrics are based on monthly values.

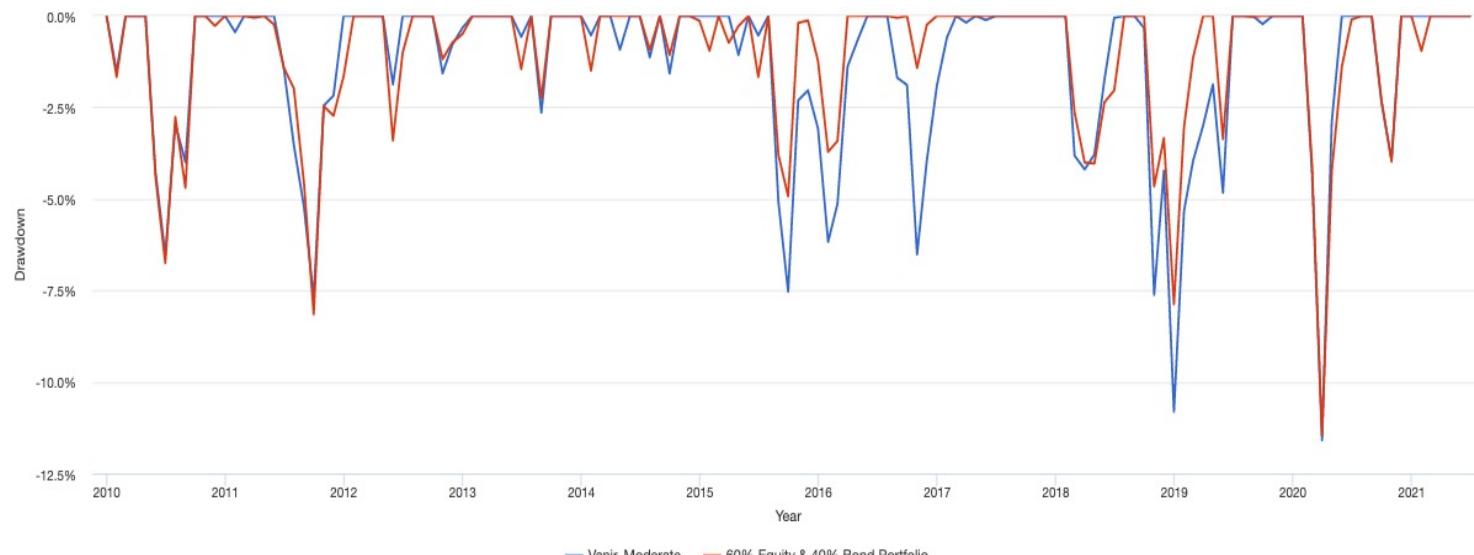
# Rolling Returns



# Rolling Returns Continued



# Drawdowns



# Drawdowns Continued

Drawdowns for Vanir, Moderate

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Feb 2020	Mar 2020	2 months	May 2020	2 months	4 months	-11.59%
2	Sep 2018	Dec 2018	4 months	Jun 2019	6 months	10 months	-10.81%
3	Jun 2011	Sep 2011	4 months	Dec 2011	3 months	7 months	-7.70%
4	Aug 2015	Sep 2015	2 months	May 2016	8 months	10 months	-7.53%
5	May 2010	Jun 2010	2 months	Sep 2010	3 months	5 months	-6.53%
6	Aug 2016	Oct 2016	3 months	Feb 2017	4 months	7 months	-6.51%
7	Feb 2018	Mar 2018	2 months	Jul 2018	4 months	6 months	-4.19%
8	Sep 2020	Oct 2020	2 months	Nov 2020	1 month	3 months	-3.92%
9	Aug 2013	Aug 2013	1 month	Sep 2013	1 month	2 months	-2.64%
10	May 2012	May 2012	1 month	Jun 2012	1 month	2 months	-1.87%

Worst 10 drawdowns included above

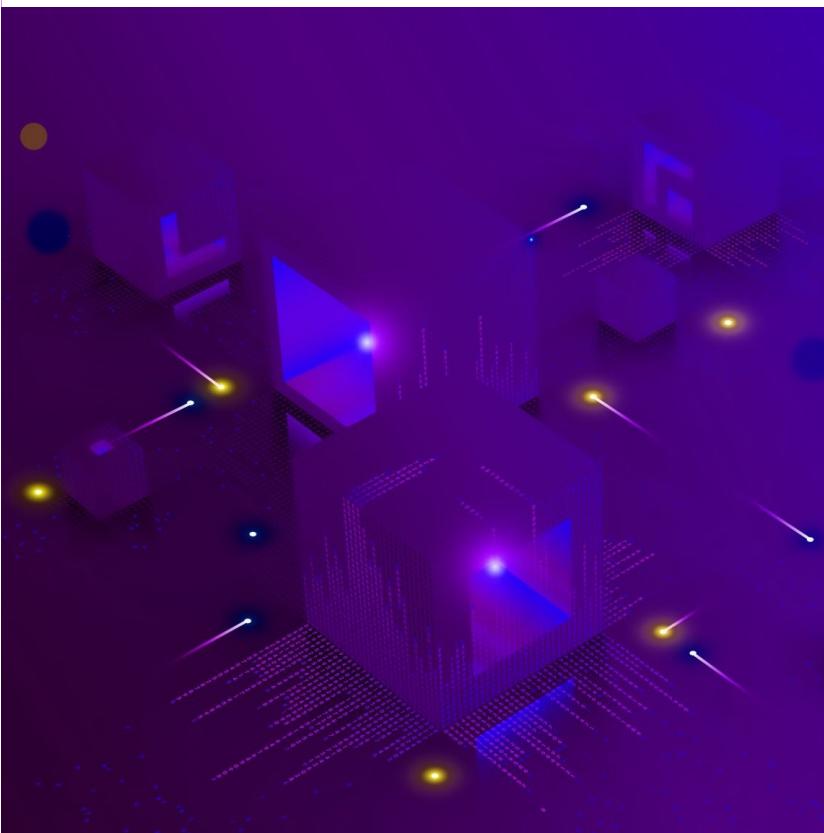
Drawdowns for 60% Equity & 40% Bond Portfolio

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Feb 2020	Mar 2020	2 months	Jul 2020	4 months	6 months	-11.46%
2	May 2011	Sep 2011	5 months	Jan 2012	4 months	9 months	-8.15%
3	Oct 2018	Dec 2018	3 months	Mar 2019	3 months	6 months	-7.87%
4	May 2010	Jun 2010	2 months	Sep 2010	3 months	5 months	-6.75%
5	Aug 2015	Sep 2015	2 months	Mar 2016	6 months	8 months	-4.93%
6	Feb 2018	Apr 2018	3 months	Jul 2018	3 months	6 months	-4.03%
7	Sep 2020	Oct 2020	2 months	Nov 2020	1 month	3 months	-3.98%
8	Apr 2012	May 2012	2 months	Jul 2012	2 months	4 months	-3.40%
9	May 2019	May 2019	1 month	Jun 2019	1 month	2 months	-3.36%
10	Aug 2013	Aug 2013	1 month	Sep 2013	1 month	2 months	-2.24%

Worst 10 drawdowns included above

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- CAGR = Compound Annual Growth Rate
- Stdev = Annualized standard deviation of monthly returns
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- The results assume annual rebalancing of portfolio assets to match the specified allocation
- The annual income is calculated from the difference between monthly total returns and split adjusted monthly price changes and thus includes both dividends and capital gains distributions.
- The annual yield as a percentage is based on the portfolio asset allocation and is not impacted by cashflows.



# **Vanir Conservative Portfolio**

# **Objective**

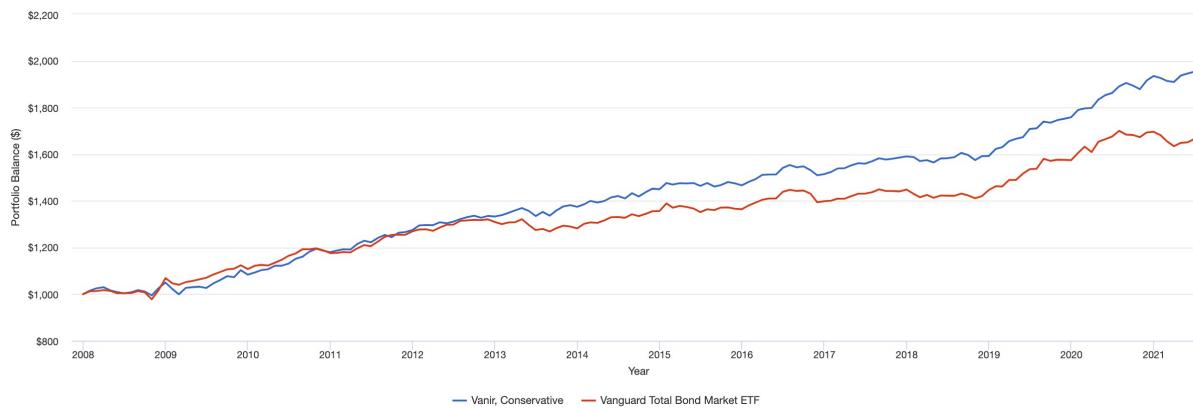
- + Vanir's conservative portfolio aims to return superior risk-adjusted returns when compared to the overall bond market (Ticker: BND). The portfolio holds five ETFs that, all together, statistically outperform the bond market. Vanir uses a genetic algorithm to find the weights for these five securities. Vanir rebalances weights every three months to ensure our algorithm picks up trends in our five specified securities

# Performance

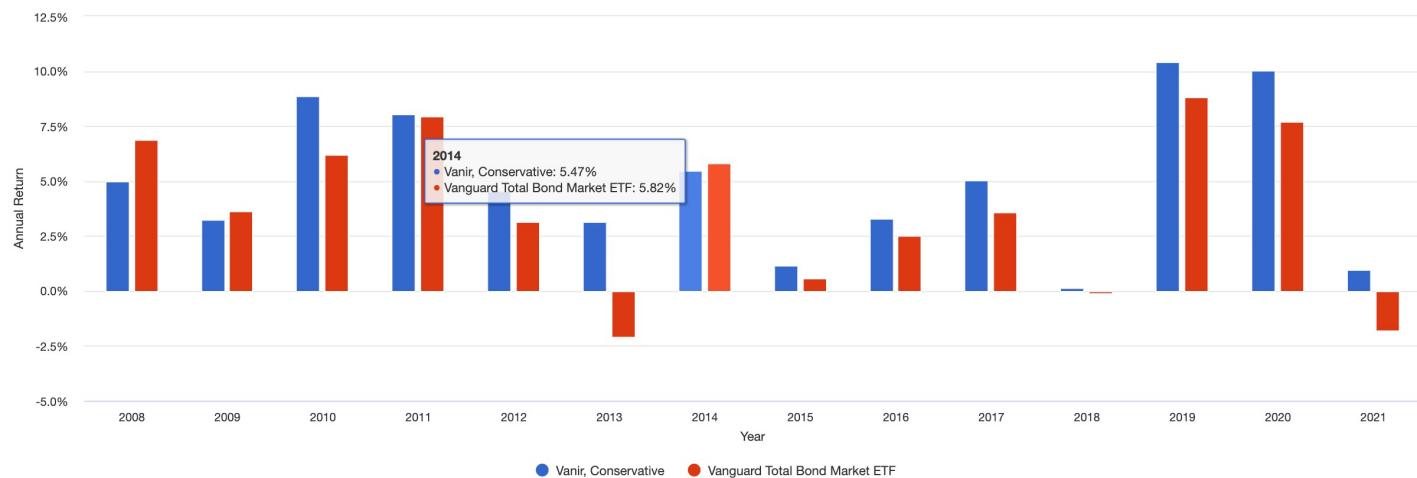
## Portfolio Returns

Portfolio	Initial Balance	Final Balance	CAGR	Stdev	Best Year	Worst Year	Max. Drawdown	Sharpe Ratio
Vanir, Conservative	\$1,000	\$1,953 ⓘ	5.08% ⓘ	3.43%	10.43%	0.12%	-4.81% ⓘ	1.30
Vanguard Total Bond Market ETF	\$1,000	\$1,666 ⓘ	3.85% ⓘ	3.70%	8.83%	-2.10%	-4.01% ⓘ	0.89

## Portfolio Growth



# Annual Returns



# Annual Returns Continued

Year	Inflation	Vanir, Conservative			Vanguard Total Bond Market ETF		
		Return	Balance	Yield	Income	Return	Balance
2008	0.09%	4.98%	\$1,050	2.93%	\$29.33	6.86%	\$1,069
2009	2.72%	3.24%	\$1,084	2.93%	\$30.79	3.64%	\$1,107
2010	1.50%	8.88%	\$1,180	2.30%	\$24.88	6.20%	\$1,176
2011	2.96%	8.04%	\$1,275	1.91%	\$22.51	7.92%	\$1,269
2012	1.74%	4.55%	\$1,333	1.23%	\$15.68	3.16%	\$1,309
2013	1.50%	3.13%	\$1,375	1.10%	\$14.69	-2.10%	\$1,282
2014	0.76%	5.47%	\$1,450	1.46%	\$20.10	5.82%	\$1,356
2015	0.73%	1.14%	\$1,466	1.53%	\$22.16	0.56%	\$1,364
2016	2.07%	3.28%	\$1,514	1.50%	\$22.03	2.52%	\$1,398
2017	2.11%	5.02%	\$1,590	1.62%	\$24.55	3.57%	\$1,448
2018	1.91%	0.12%	\$1,592	1.94%	\$30.91	-0.12%	\$1,447
2019	2.29%	10.43%	\$1,758	2.11%	\$33.64	8.83%	\$1,574
2020	1.36%	10.04%	\$1,935	1.26%	\$22.23	7.71%	\$1,696
2021	4.31%	0.94%	\$1,953	0.37%	\$7.08	-1.78%	\$1,666

Annual return for 2021 is from 01/01/2021 to 06/30/2021

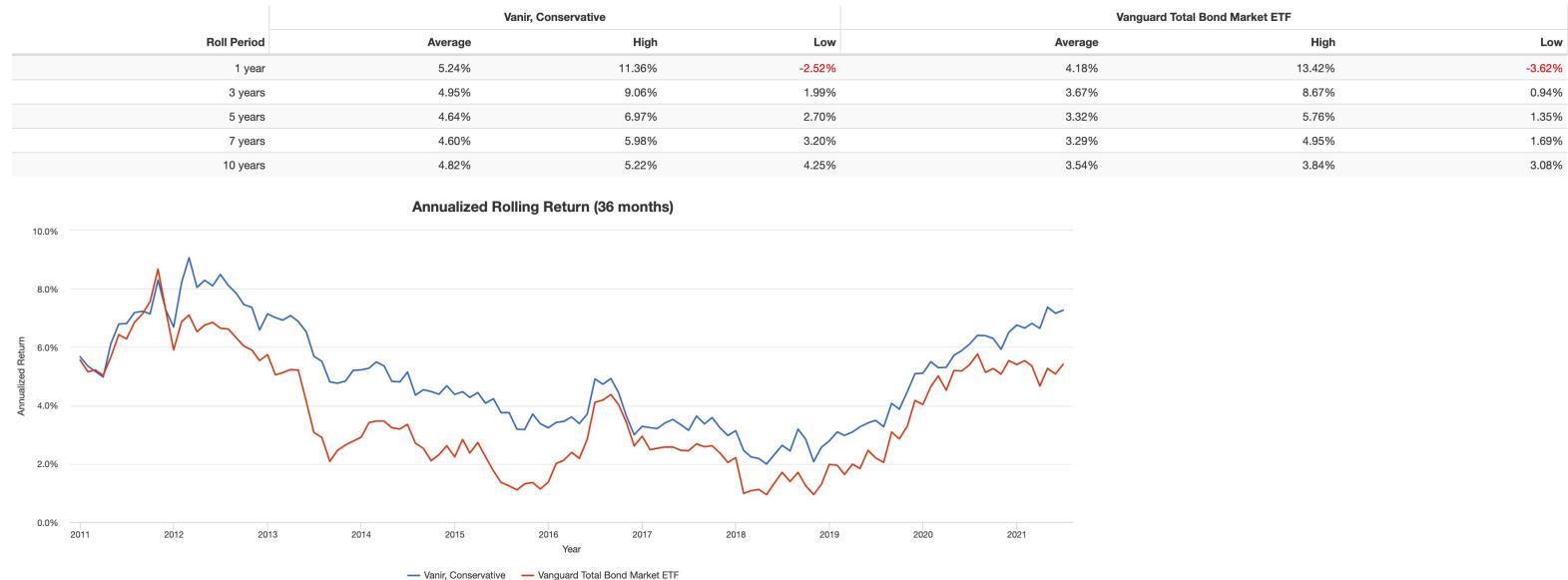
**"Income" denotes dividends earned from portfolio yield.**

# Portfolio Statistics

Metric	Vanir, Conservative	Vanguard Total Bond Market ETF
Arithmetic Mean (monthly)	0.42%	0.32%
Arithmetic Mean (annualized)	5.15%	3.92%
Geometric Mean (monthly)	0.41%	0.32%
Geometric Mean (annualized)	5.08%	3.85%
Volatility (monthly)	0.99%	1.07%
Volatility (annualized)	3.43%	3.70%
Downside Deviation (monthly)	0.51%	0.57%
Max. Drawdown	-4.81%	-4.01%
US Market Correlation	0.43	0.06
Beta <sup>[1]</sup>	0.72	1.00
Alpha (annualized)	2.25%	0.00%
R <sup>2</sup>	60.55%	100.00%
Sharpe Ratio	1.30	0.89
Sortino Ratio	2.44	1.61
Treynor Ratio (%)	6.18	3.28
Calmar Ratio	3.77	1.40
Active Return	1.23%	N/A
Tracking Error	2.39%	N/A
Information Ratio	0.52	N/A
Skewness	-0.15	0.47
Excess Kurtosis	0.26	2.92
Historical Value-at-Risk (5%)	-1.19%	-1.30%
Analytical Value-at-Risk (5%)	-1.23%	-1.44%
Conditional Value-at-Risk (5%)	-1.68%	-1.88%
Upside Capture Ratio (%)	102.25	100.00
Downside Capture Ratio (%)	66.28	100.00
Safe Withdrawal Rate	9.63%	9.16%
Perpetual Withdrawal Rate	3.12%	1.93%
Positive Periods	113 out of 162 (69.75%)	102 out of 162 (62.96%)
Gain/Loss Ratio	1.24	1.34

<sup>[1]</sup> Vanguard Total Bond Market ETF is used as the benchmark for calculations. Value-at-risk metrics are based on monthly values.

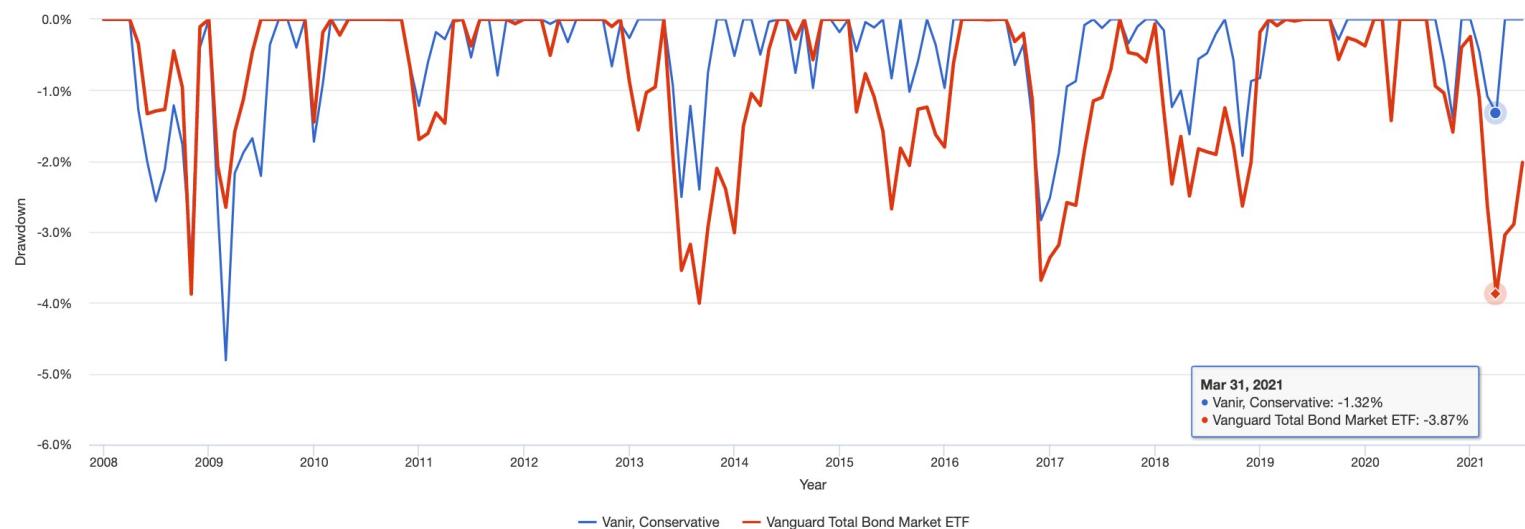
# Rolling Returns



# Rolling Returns Continued



# Drawdowns



# Drawdowns Continued

Drawdowns for Vanir, Conservative

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Jan 2009	Feb 2009	2 months	Aug 2009	6 months	8 months	-4.81%
2	Apr 2008	Oct 2008	7 months	Dec 2008	2 months	9 months	-3.40%
3	Aug 2016	Nov 2016	4 months	May 2017	6 months	10 months	-2.83%
4	May 2013	Jun 2013	2 months	Oct 2013	4 months	6 months	-2.51%
5	Sep 2018	Oct 2018	2 months	Jan 2019	3 months	5 months	-1.93%
6	Dec 2009	Dec 2009	1 month	Feb 2010	2 months	3 months	-1.73%
7	Jan 2018	Apr 2018	4 months	Aug 2018	4 months	8 months	-1.62%
8	Sep 2020	Oct 2020	2 months	Nov 2020	1 month	3 months	-1.41%
9	Jan 2021	Mar 2021	3 months	Apr 2021	1 month	4 months	-1.32%
10	Nov 2010	Dec 2010	2 months	Apr 2011	4 months	6 months	-1.22%

Worst 10 drawdowns included above

Drawdowns for Vanguard Total Bond Market ETF

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	May 2013	Aug 2013	4 months	May 2014	9 months	1 year 1 month	-4.01%
2	Apr 2008	Oct 2008	7 months	Dec 2008	2 months	9 months	-3.88%
3	Aug 2020	Mar 2021	8 months				-3.87%
4	Aug 2016	Nov 2016	4 months	Aug 2017	9 months	1 year 1 month	-3.88%
5	Feb 2015	Jun 2015	5 months	Feb 2016	8 months	1 year 1 month	-2.67%
6	Jan 2009	Feb 2009	2 months	Jun 2009	4 months	6 months	-2.85%
7	Sep 2017	Oct 2018	1 year 2 months	Jan 2019	3 months	1 year 5 months	-2.63%
8	Nov 2010	Dec 2010	2 months	May 2011	5 months	7 months	-1.70%
9	Dec 2012	Jan 2013	2 months	Apr 2013	3 months	5 months	-1.56%
10	Dec 2009	Dec 2009	1 month	Feb 2010	2 months	3 months	-1.45%

Worst 10 drawdowns included above

Notes on results:

- Past performance is no guarantee of future results, which may vary. All use is subject to terms of service.
- Investing involves risk, including possible loss of principal. The value of the investments and the income derived from them may fluctuate over time.
- All portfolio returns presented are hypothetical and backtested. Hypothetical returns do not reflect trading costs, transaction fees, or taxes.
- The results do not constitute investment advice or recommendation, are provided solely for informational purposes, and are not an offer to buy or sell any securities.
- The results are based on the total return of assets and assume that all received dividends and distributions are reinvested.
- The annual results for 2021 are based on monthly returns from January to June
- CAGR = Compound Annual Growth Rate
- Stdev = Annualized standard deviation of monthly returns
- Sharpe and Sortino ratios are calculated and annualized from monthly excess returns over risk free rate (3-month treasury bill)
- Stock market correlation is based on the correlation of monthly returns
- Drawdown analysis is calculated based on monthly returns excluding cashflows
- The results assume annual rebalancing of portfolio assets to match the specified allocation
- The annual income is calculated from the difference between monthly total returns and split adjusted monthly price changes and thus includes both dividends and capital gains distributions.
- The annual yield as a percentage is based on the portfolio asset allocation and is not impacted by cashflows.

2.5 year Annualized Return from 12/31/17 to 06/30/2020

