Report Parameters

Start Date	05/01/2018
End Date	06/30/2018
Initial Balance	\$10,000
Periodic Adjustment	None
Rebalancing	Rebalance monthly
Reinvest Dividends	Yes
Benchmark	Vanguard 500 Index Investor

III Portfolio Visualizer

Portfolio Backtest

Portfolio 1

Ticker	Name	Allocation
GM	General Motors Company	100.00%
CARZ	First Trust NASDAQ Global Auto ETF	-100.00%

Portfolio 2

Ticker	Name			Allocation
GM	General Motors Company			105.00%
CARZ	First Trust NASDAQ Global Auto ETF			-205.00%
Portfolio 3				
Ticker	Name	Allocation		
GM	General Motors Company	100.00%		
				GM
				GM
			100 %	

Portfolio Performance

Metric	Portfolio 1	Portfolio 2	Portfolio 3	Vanguard 500 Index Investor
Start Balance	\$10,000	\$10,000	\$10,000	\$10,000
End Balance	\$11,783	\$12,880	\$10,817	\$10,301
End Balance (inflation adjusted)	\$11,716	\$12,806	\$10,755	\$10,242
CAGR	167.65%	356.50%	60.16%	19.50%
CAGR (inflation adjusted)	158.58%	341.04%	54.73%	15.46%
Stdev	52.34%	50.58%	56.71%	4.38%
Best Year	17.83%	28.80%	8.17%	3.01%
Worst Year	17.83%	28.80%	8.17%	3.01%
Max. Drawdown	-1.61%	0.00%	-6.93%	0.00%
Sharpe Ratio	2.05	3.28	0.95	3.72
Sortino Ratio	25.03	N/A	3.12	N/A
US Stock Market Correlation	N/A	N/A	N/A	N/A

Portfolio Growth



Annual Returns



Risk and Return Metrics

Metric	Portfolio 1	Portfolio 2	Portfolio 3	Vanguard 500 Index Investor
Arithmetic Mean (monthly)	9.07%	13.96%	4.65%	1.50%
Arithmetic Mean (annualized)	183.58%	379.64%	72.44%	19.56%
Geometric Mean (monthly)	8.55%	13.49%	4.00%	1.50%
Geometric Mean (annualized)	167.65%	356.50%	60.16%	19.50%
Volatility (monthly)	15.11%	14.60%	16.37%	1.27%
Volatility (annualized)	52.34%	50.58%	56.71%	4.38%
Downside Deviation (monthly)	1.14%	0.00%	4.90%	0.00%
Max. Drawdown	-1.61%	0.00%	-6.93%	0.00%
US Market Correlation	N/A	N/A	N/A	N/A
Beta (*)	11.94	11.54	12.94	1.00
Alpha (annualized)	-106.00%	-40.18%	-177.12%	0.00%
R Squared	100.00%	100.00%	100.00%	100.00%
Sharpe Ratio	2.05	3.28	0.95	3.72
Sortino Ratio	25.03	N/A	3.12	N/A
Treynor Ratio (%)	8.98	14.37	4.18	16.32
Information Ratio	1.90	3.24	0.72	N/A
Diversification Ratio	N/A	N/A	N/A	N/A
Skewness	N/A	N/A	N/A	N/A
Excess Kurtosis	N/A	N/A	N/A	N/A
Historical Value-at-Risk (5%)	-1.61%	0.00%	-6.93%	0.00%
Analytical Value-at-Risk (5%)	-8.44%	-2.90%	-22.28%	-0.58%
Conditional Value-at-Risk (5%)	N/A	0.00%	N/A	0.00%
Upside Capture Ratio (%)	859.57	1,827.88	308.44	100.00
Downside Capture Ratio (%)	N/A	N/A	N/A	N/A
Positive Periods	1 out of 2 (50.00%)	2 out of 2 (100.00%)	1 out of 2 (50.00%)	2 out of 2 (100.00%)
Gain/Loss Ratio	12.28	N/A	2.34	N/A

(*) Vanguard 500 Index Investor is used as the benchmark for calculations. Value-at-risk metrics are based on monthly returns.

Portfolio	1 Returi	าร													
Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Inflation	Balance
2018					19.76%	-1.61%							17.83%	2.22%	\$11,783

Portfolio 2 Returns

Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	Inflation	Balance
2018					24.28%	3.63%							28.80%	2.22%	\$12,880
Portfolio 3	3 Retur	ns													
Year	Jan	Feb	Mar	Apr	Мау	Jun	J	ul Au	ig Se	p Oc	t No	ov De	c Total	Inflation	Balance
2018					16.22%	-6.9	3%						8.17%	2.22%	\$10,817
Vanguard	l 500 Inc	dex Inv	estor R	eturns											
Year	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oc	t N	ov	Dec Total	Inflation	Balance
2018					2.39%	0.61%							3.0	1% 2.22%	\$10,301
Exposure	Exposures for Portfolio 3														
Ticker			Name			C	ategory	/			Weig	ht _		Breakdowns	
GM	Genera	al Motors	Compar	ıy	Capital Good	s / Auto Man	ufacturir	ng			100.0	0% Ass	et Allocation, Capi	talization, Sector	

III Portfolio Visualizer

Portfolio Backtest

Asset Allocation for Portfolio 3

Category	Weight
US Stocks	100.00%
Intl Stocks	0.00%
US Bonds	0.00%
Intl Bonds	0.00%
Other	0.00%
Cash	0.00%





Equity Market Capitalization for Portfolio 3

Stock Sectors for Portfolio 3

Category	Weight	Category	Weight
Large Cap	100.00%	Basic Materials	0.00%
Mid Cap	0.00%	Consumer Cyclical	0.00%
Small Cap	0.00%	Financial Services	0.00%
		Real Estate	0.00%
		Consumer Defensive	0.00%
		Healthcare	0.00%
		Utilities	0.00%
		Communication Services	0.00%
		Energy	0.00%
		Industrials	0.00%
		Technology	0.00%
		Capital Goods	100.00%

Drawdowns for Portfolio 1

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Jun 2018	Jun 2018	1 month				-1.61%

Drawdowns for Portfolio 2



Drawdowns for Portfolio 3

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Jun 2018	Jun 2018	1 month				-6.93%

Drawdowns for Vanguard 500 Index Investor

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
-	-	-	-	-	-	-	-

Portfolio Components

Ticker	Name	CAGR	Stdev	Best Year	Worst Year	Max DD	Sharpe Ratio	Sortino Ratio	US Mkt Correlation
GM	General Motors Company	60.16%	56.71%	8.17%	8.17%	-6.93%	0.95	3.12	N/A
CARZ	First Trust NASDAQ Global Auto ETF	-42.13%	4.49%	-8.71%	-8.71%	-8.71%	-12.28	-3.40	N/A

Notes:

• Past performance is not a guarantee of future returns and data and other errors may exist. See Disclaimer and Terms of Use

• The entered time period is automatically adjusted based on the available return data for the specified assets

• The annual results for 2018 are based on full calendar months from May 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 (1-month t-bills)

• Stock market correlation is based on the correlation of monthly returns

Drawdowns are calculated based on monthly returns

Monthly return series of the selected benchmark is used for results comparisons

• The backtested results include monthly rebalancing of portfolio assets to match the specified allocation

• The results use total return and assume that all received dividends and distributions are reinvested. Taxes and transaction fees are not included

• Fund fundamentals data as of 07/05/2018. (c) 2018 Morningstar. All Rights Reserved. The fund fundamentals information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information.