



Recommended Asset Allocation
ghoozie — 2020-12-15

FRONTIER CURVE OPTIMAL PORTFOLIO ANALYSIS
MONTE CARLO SIMULATION OF RETURNS
CORRELATION MATRIX

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1 Statistical Terminology & Asset Class Descriptions

Expected Return - Of an investing strategy is the amount of money you are expected to get back from your investment. For example, if 90 dollars is invested for 1 year with an expected return of 100 dollars, then in the average case the investment will yield back 100 dollars.

Risk - Or standard deviation of an investing strategy is a measure of how much the return of an investment strategy will vary from it's expected return. For example, an investment strategy with an expected return of 20% and a risk of 8% will yield 112% to 128% return with a probability of 68.2% , and 104% to 136% return with a probability of 94.4%

The 18 Asset Classes :

Asset Class	Index	Description
Cash	BIL	Currencies, Foreign Currencies.
Commodities	GSG	Basic goods used in commerce.
International Gov Bonds	GVI	Govt. bonds that mature in 5-10 years.
High Yield Bonds	HYG	Lower credit rating higher return bonds.
Real Estate	IYR	Land and buildings.
Emerging Mkt Debt	JEDAX	Bonds issued by emerging countries.
Large Cap Value	JKD	Undervalued stocks from big companies.
Corporate Bonds	LQD	Bonds issued by a corporation.
Mid Cap	MDY	Stocks from mid sized companies.
Municipal Bonds	MUB	Bonds Issued by local government.
Foreign Bonds	PIGLX	Bonds issued in other countries.
Emerging Mkt Stock	VEMAX	Stocks from emerging Mkt. countries.
V.C.	VFINX	New and innovative companies.
International Stock	VGTSX	Stocks not traded in U.S.A. exchanges.
Large Cap Growth	VIGRX	Fastly growing stocks from big companies.
Small Cap Value	VISVX	Undervalued stocks from small companies.
Long Gov Bonds	VUSTX	Govt. bonds mature in more than 10 years.
Small Cap Growth	^RUT	Fastly growing stocks from small companies.

2 Investment Profile — Prescribed Allocation Changes

Investment Profile:

Name : ghoozie

Birthday : 06/22/1993

Time Frame : 7

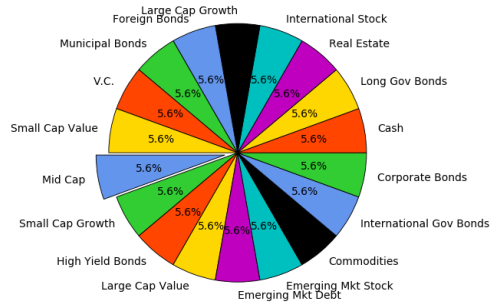
Available Funds : \$3,600

Preferred Risk : $\pm 141.05\%$ Yearly

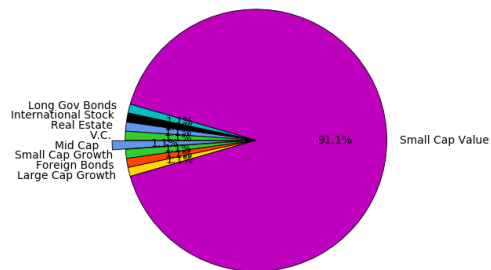
Preferred Asset Classes:

- Real Estate
- Mid Cap
- Foreign Bonds
- V.C.
- International Stock
- Large Cap Growth
- Small Cap Value
- Long Gov Bonds
- Small Cap Growth

(a) Current Portfolio



(b) New Portfolio



Prescribed Allocation Changes

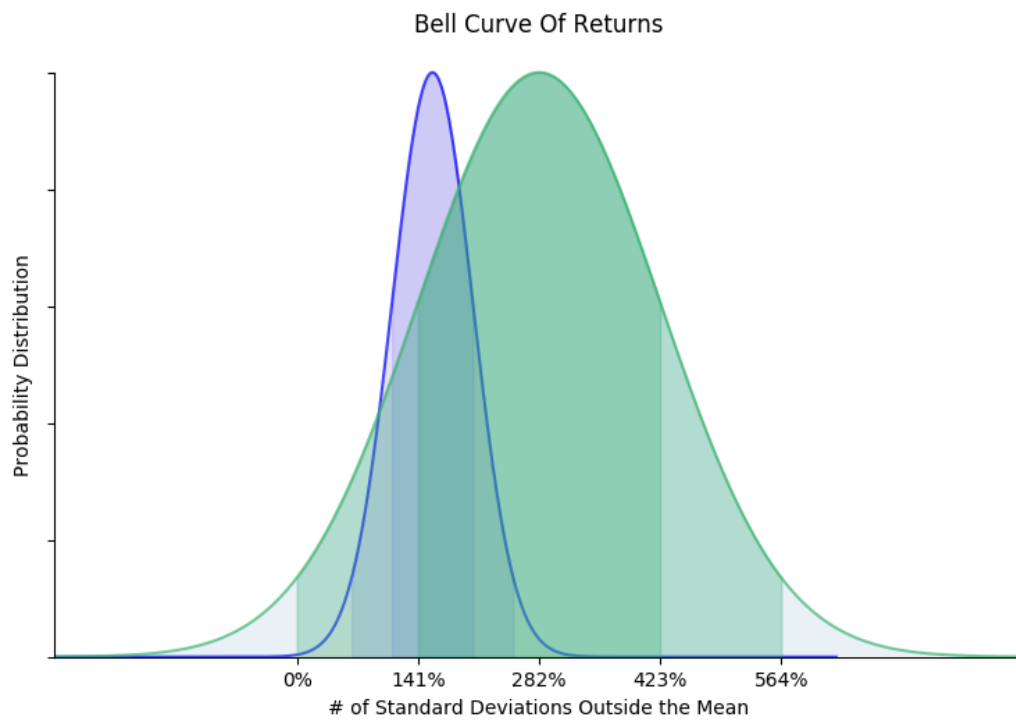
Asset Class	Current	Suggested	Change
Cash	\$200	\$0	(\$200)
Commodities	\$200	\$0	(\$200)
International Gov Bonds	\$200	\$0	(\$200)
High Yield Bonds	\$200	\$0	(\$200)
Real Estate	\$200	\$40	(\$160)
Emerging Mkt Debt	\$200	\$0	(\$200)
Large Cap Value	\$200	\$0	(\$200)
Corporate Bonds	\$200	\$0	(\$200)
Mid Cap	\$200	\$40	(\$160)
Municipal Bonds	\$200	\$0	(\$200)
Foreign Bonds	\$200	\$40	(\$160)
Emerging Mkt Stock	\$200	\$0	(\$200)
V.C.	\$200	\$39	(\$161)
International Stock	\$200	\$40	(\$160)
Large Cap Growth	\$200	\$39	(\$161)
Small Cap Value	\$200	\$3,279	\$3,079
Long Gov Bonds	\$200	\$40	(\$160)
Small Cap Growth	\$200	\$40	(\$160)

3 Performance Improvements Of Prescribed Portfolio

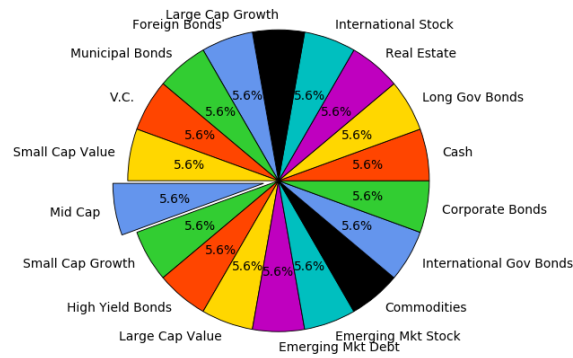
Below are 7 year simulation results of your current investing strategy versus the investment strategy prescribed in this report.

Change In Expected Return :

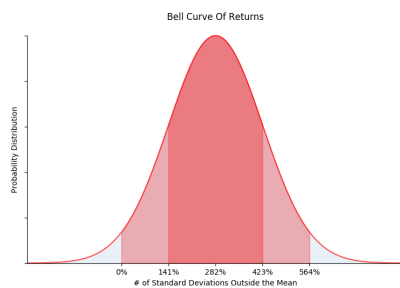
Change in Risk : 94.03%



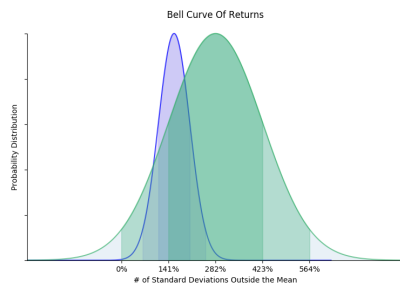
4 Current Portfolio Overview - Statistical Analysis



Portfolio Breakdown



Current Portfolio 1 Year Projections



Current Portfolio 7 Year Projections

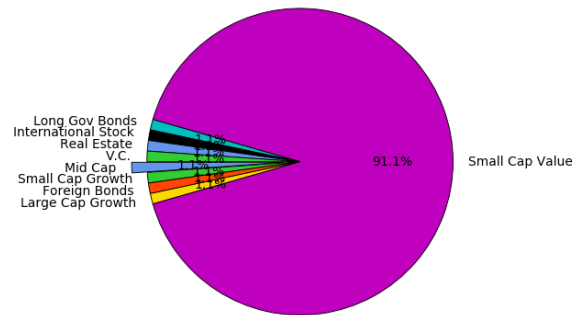
1 Year Expected Return (\$): \$5,757 59.94%

1 Year Risk (Std Deviation %) : $\pm 17.4\%$

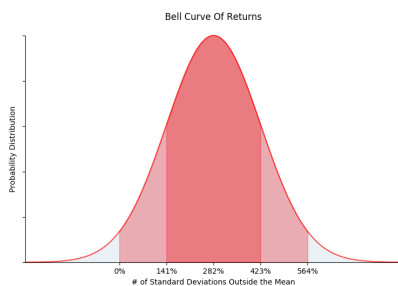
7 Year Expected Return (\$): \$91,695 2447.1%

7 Year Risk (Std Deviation %): $\pm 886.24\%$

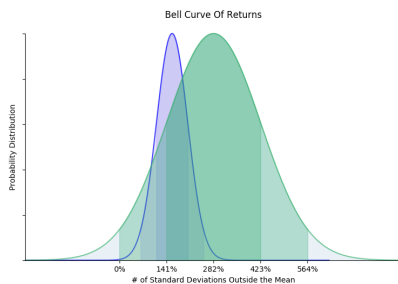
5 Prescribed Portfolio Overview - Statistical Analysis



Portfolio Breakdown



Prescribed Portfolio 1 Year Projections



Prescribed Portfolio 7 Year Projections

1 Year Expected Return (\$): \$10,218 183.86%

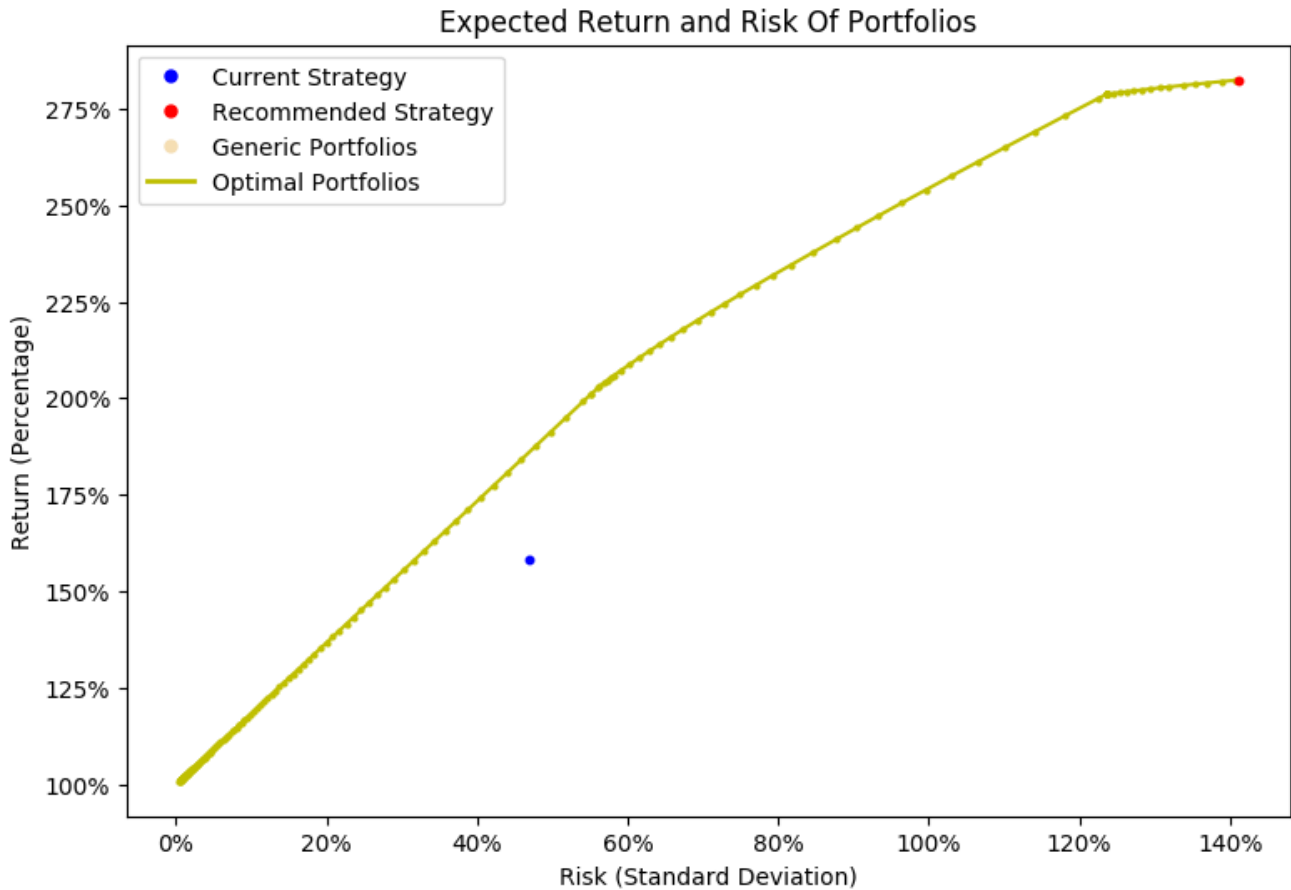
1 Year Risk (Std Deviation %): $\pm 49.88\%$

7 Year Expected Return (\$): \$5,112,332 141909.23%

7 Year Risk (Std Deviation %): $\pm 98948.76\%$

6 Frontier Curve

In 1990, Harry Markowitz won a nobel prize for his contributions to portfolio balancing theory. Markowitz discovered that given assets to buy from and funds to buy with, all of the optimal portfolios formed on a curved line called the "Frontier Curve."



Risk (Std. Deviation) : $\pm 141.05\%$

Expected Return (%): 182.38%

Adjustment of Risk (%): 94.03%

Change in Return (%):

7 Correlation Matrices

Corr.	BIL	GSG	GVI	HYG	IYR	JEDAX	JKD	LQD	MDY	MUB	PIGLX	VEMAX	VFINX
BIL	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
GSG	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
GVI	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
HYG	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
IYR	nan	nan	nan	nan	1.0	nan	nan	nan	0.97	nan	0.88	nan	nan
JEDAX	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
JKD	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
LQD	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
MDY	nan	nan	nan	nan	0.97	nan	nan	nan	1.0	nan	0.89	nan	nan
MUB	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
PIGLX	nan	nan	nan	nan	0.88	nan	nan	nan	0.89	nan	1.0	nan	nan
VEMAX	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan	nan
VFINX	nan	nan	nan	nan	0.95	nan	nan	nan	0.98	nan	0.82	nan	nan
VGTSX	nan	nan	nan	nan	0.92	nan	nan	nan	0.9	nan	0.87	nan	nan
VIGRX	nan	nan	nan	nan	0.91	nan	nan	nan	0.95	nan	0.79	nan	nan
VISVX	nan	nan	nan	nan	0.97	nan	nan	nan	0.99	nan	0.88	nan	nan
VUSTX	nan	nan	nan	nan	0.91	nan	nan	nan	0.91	nan	0.93	nan	nan
^RUT	nan	nan	nan	nan	0.97	nan	nan	nan	0.99	nan	0.87	nan	nan

Above is the Semantic Correlation Matrix of the selected Asset Classes. It shows how each asset class is correlated to one another

BIL	GSG	GVI	HYG	JEDAX	JKD	LQD	MUB	VEMAX	VGTSX	PIGLX	VUSTX	VFINX
0%	0%	0%	0%	0%	0%	0%	0%	0%	52%	60%	78%	86%

Above is the ranking of the selected asset classes by risk

BIL	GSG	GVI	HYG	JEDAX	JKD	LQD	MUB	VEMAX	VFINX	VGTSX	VIGRX	^RUT
0%	0%	0%	0%	0%	0%	0%	0%	0%	64%	65%	66%	104%

Above is the ranking of the selected asset classes by return