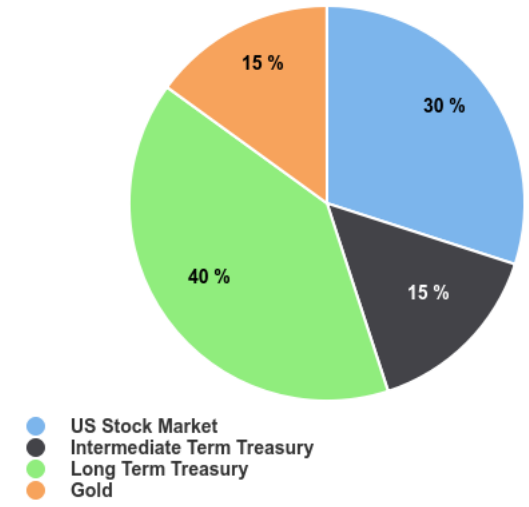


Report Parameters

Start Date	01/01/1978
End Date	02/28/2019
Initial Balance	\$10,000
Periodic Adjustment	Contribute \$500 Monthly
Rebalancing	Rebalance annually
Reinvest Dividends	Yes

Portfolio 1

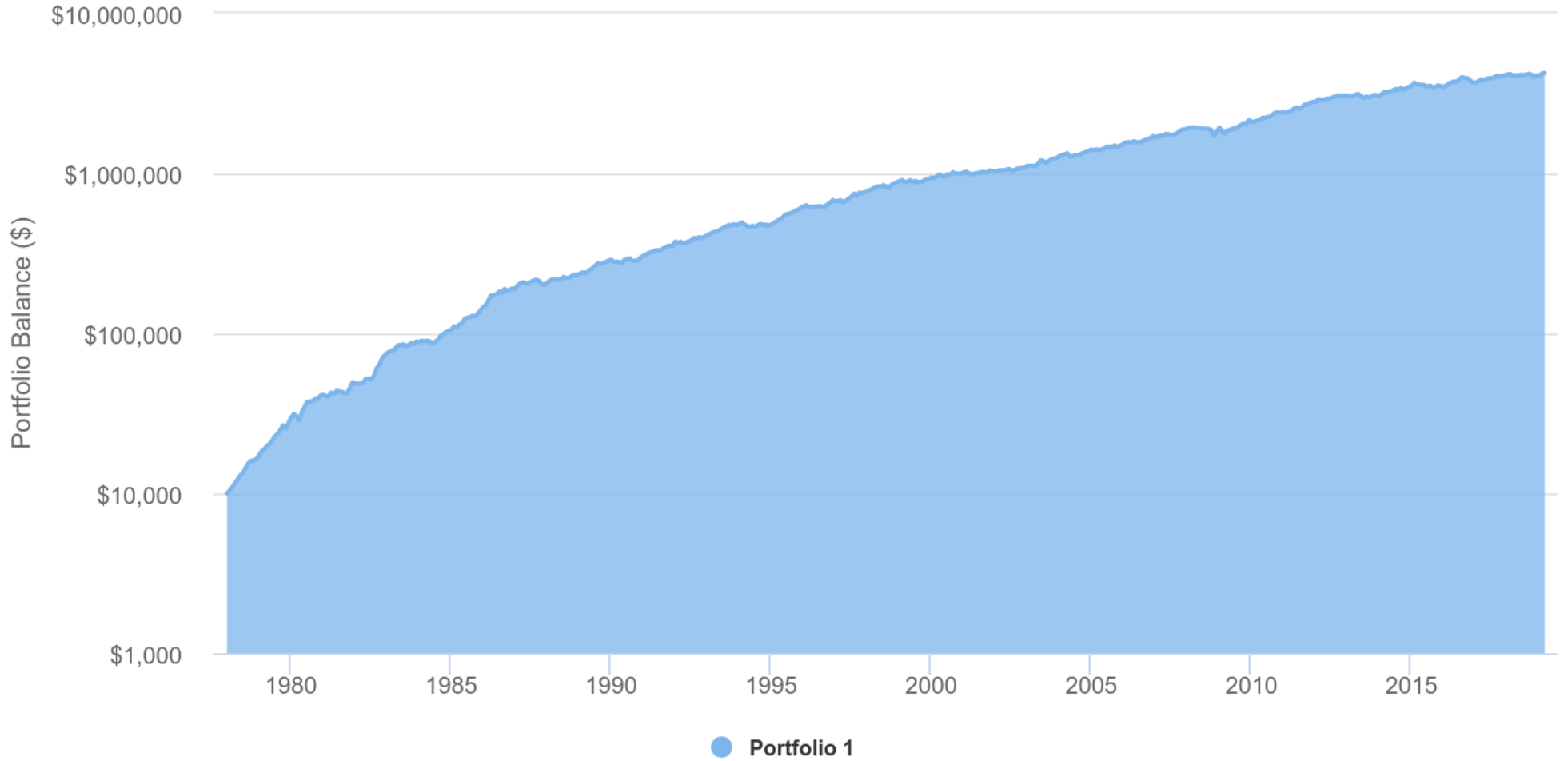
Asset Class	Allocation
US Stock Market	30.00%
Intermediate Term Treasury	15.00%
Long Term Treasury	40.00%
Gold	15.00%



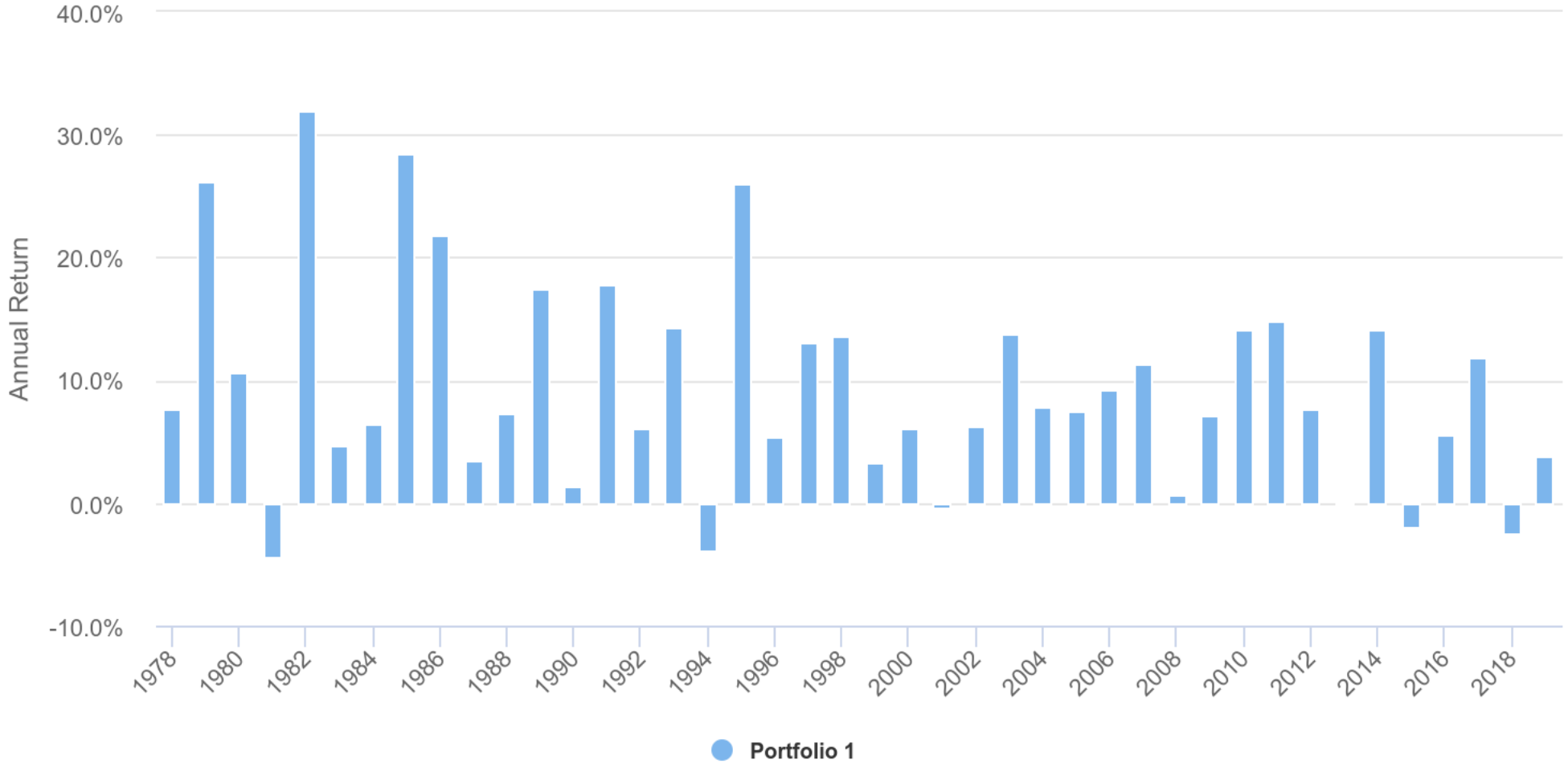
Portfolio Performance

Metric	Portfolio 1
Start Balance	\$10,000
End Balance	\$4,236,333
End Balance (inflation adjusted)	\$1,045,144
CAGR	15.83%
CAGR (inflation adjusted)	11.96%
TWRR	9.30%
MWRR	8.51%
Stdev	7.96%
Best Year	31.90%
Worst Year	-4.46%
Max. Drawdown	-12.00%
Max. Drawdown (excluding cashflows)	-13.06%
Sharpe Ratio	0.61
Sortino Ratio	0.96
US Stock Market Correlation	0.63

Portfolio Growth



Annual Returns



Risk and Return Metrics

Metric	Portfolio 1
Arithmetic Mean (monthly)	0.77%
Arithmetic Mean (annualized)	9.64%
Geometric Mean (monthly)	0.74%
Geometric Mean (annualized)	9.30%
Volatility (monthly)	2.30%
Volatility (annualized)	7.96%
Downside Deviation (monthly)	1.23%
Max. Drawdown	-13.06%
US Market Correlation	0.63
Beta (*)	0.33
Alpha (annualized)	5.28%
R Squared	39.18%
Sharpe Ratio	0.61
Sortino Ratio	0.96
Treynor Ratio (%)	14.72
Calmar Ratio	0.59
Active Return	-2.15%
Tracking Error	11.92%
Information Ratio	-0.18
Skewness	0.10
Excess Kurtosis	1.79
Historical Value-at-Risk (5%)	-2.89%
Analytical Value-at-Risk (5%)	-3.01%
Conditional Value-at-Risk (5%)	-4.22%
Upside Capture Ratio (%)	42.14
Downside Capture Ratio (%)	20.90
Sustainable Withdrawal Rate	6.30%
Positive Periods	320 out of 494 (64.78%)
Gain/Loss Ratio	1.32

(*) US stock market is used as the benchmark for calculations. Value-at-risk metrics are based on monthly values.

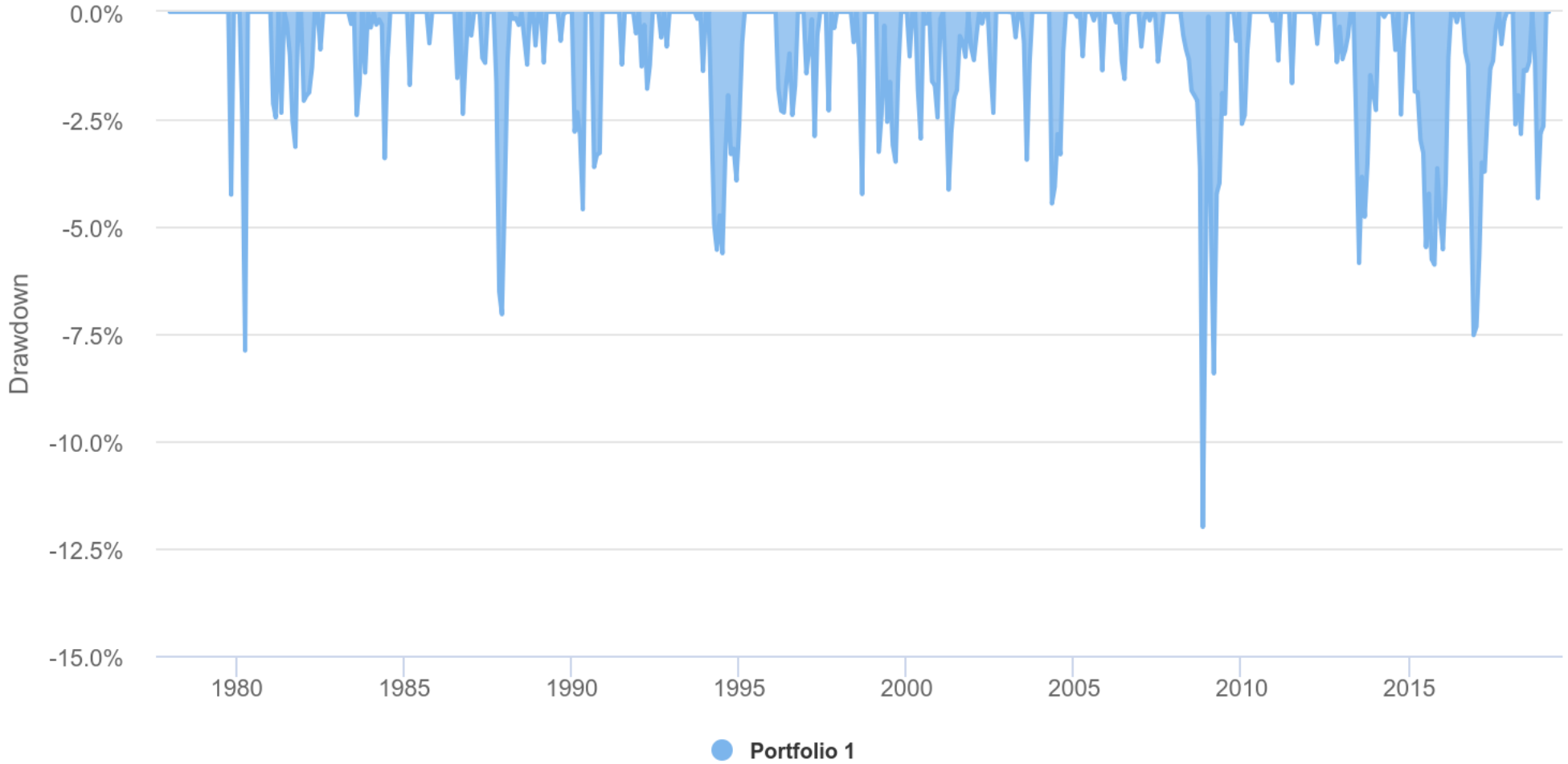
Annual Returns

Year	Inflation	Portfolio 1 Return	Portfolio 1 Balance	Portfolio 1 Adjustment
1978	9.02%	7.64%	\$17,276	\$6,303
1979	13.29%	26.22%	\$29,753	\$7,012
1980	12.52%	10.66%	\$41,331	\$7,962
1981	8.92%	-4.46%	\$48,417	\$8,785
1982	3.83%	31.90%	\$75,372	\$9,324
1983	3.79%	4.62%	\$88,521	\$9,623
1984	3.95%	6.50%	\$104,985	\$10,037
1985	3.80%	28.38%	\$146,621	\$10,393
1986	1.10%	21.83%	\$189,662	\$10,590
1987	4.43%	3.53%	\$207,064	\$10,978
1988	4.42%	7.36%	\$234,013	\$11,426
1989	4.65%	17.36%	\$287,492	\$11,977
1990	6.11%	1.44%	\$304,785	\$12,624
1991	3.06%	17.80%	\$373,414	\$13,159
1992	2.90%	6.00%	\$410,037	\$13,557
1993	2.75%	14.27%	\$483,165	\$13,957
1994	2.67%	-3.84%	\$478,865	\$14,321
1995	2.54%	25.99%	\$619,611	\$14,723
1996	3.32%	5.39%	\$668,817	\$15,155
1997	1.70%	12.99%	\$772,293	\$15,509
1998	1.61%	13.67%	\$894,605	\$15,750
1999	2.68%	3.28%	\$940,638	\$16,094
2000	3.39%	6.00%	\$1,014,197	\$16,638
2001	1.55%	-0.32%	\$1,028,136	\$17,108
2002	2.38%	6.34%	\$1,111,382	\$17,379
2003	1.88%	13.82%	\$1,284,085	\$17,774
2004	3.26%	7.81%	\$1,403,598	\$18,250
2005	3.42%	7.45%	\$1,527,882	\$18,869
2006	2.54%	9.20%	\$1,688,855	\$19,478
2007	4.08%	11.41%	\$1,902,804	\$20,033
2008	0.09%	0.63%	\$1,936,048	\$20,802
2009	2.72%	7.14%	\$2,096,430	\$20,728
2010	1.50%	14.19%	\$2,416,311	\$21,068

Year	Inflation	Portfolio 1 Return	Portfolio 1 Balance	Portfolio 1 Adjustment
2011	2.96%	14.90%	\$2,799,715	\$21,733
2012	1.74%	7.65%	\$3,036,493	\$22,183
2013	1.50%	0.08%	\$3,061,518	\$22,508
2014	0.76%	14.16%	\$3,519,106	\$22,873
2015	0.73%	-1.90%	\$3,474,580	\$22,900
2016	2.07%	5.63%	\$3,692,722	\$23,189
2017	2.11%	11.91%	\$4,157,329	\$23,683
2018	1.91%	-2.48%	\$4,078,283	\$24,262
2019	0.19%	3.78%	\$4,236,333	\$4,053

Annual returns for 2019 are based on partial year data

Drawdowns



Drawdowns for Historical Market Stress Periods

Stress Period	Start	End	Portfolio 1
Black Monday Period	Sep 1987	Nov 1987	-8.30%
Asian Crisis	Jul 1997	Jan 1998	-2.47%
Russian Debt Default	Jul 1998	Oct 1998	-4.55%
Dotcom Crash	Mar 2000	Oct 2002	-4.41%
Subprime Crisis	Nov 2007	Mar 2009	-12.66%

Drawdowns for Portfolio 1 (worst 10)

Rank	Start	End	Length	Recovery By	Recovery Time	Underwater Period	Drawdown
1	Mar 2008	Oct 2008	8 months	Jul 2009	9 months	1 year 5 months	-12.00%
2	Feb 1980	Mar 1980	2 months	Apr 1980	1 month	3 months	-7.89%
3	Aug 2016	Nov 2016	4 months	Aug 2017	9 months	1 year 1 month	-7.53%
4	Sep 1987	Nov 1987	3 months	Feb 1988	3 months	6 months	-7.05%
5	Feb 2015	Sep 2015	8 months	Mar 2016	6 months	1 year 2 months	-5.89%
6	May 2013	Jun 2013	2 months	Jan 2014	7 months	9 months	-5.85%
7	Feb 1994	Jun 1994	5 months	Feb 1995	8 months	1 year 1 month	-5.62%
8	Jan 1990	Apr 1990	4 months	May 1990	1 month	5 months	-4.60%
9	Apr 2004	Apr 2004	1 month	Sep 2004	5 months	6 months	-4.46%
10	Sep 2018	Oct 2018	2 months	Jan 2019	3 months	5 months	-4.34%

Portfolio Components

Name	CAGR	Stdev	Best Year	Worst Year	Max DD	Sharpe Ratio	Sortino Ratio	US Mkt Correlation
US Stock Market	11.44%	15.16%	35.79%	-37.04%	-50.89%	0.50	0.72	1.00
Intermediate Term Treasury	7.11%	5.99%	31.13%	-4.33%	-10.70%	0.45	0.71	0.07
Long Term Treasury	8.24%	10.96%	47.10%	-13.03%	-23.12%	0.38	0.60	0.05
Gold	5.01%	18.89%	126.55%	-32.60%	-61.78%	0.12	0.18	0.04

Monthly Correlations

Name	US Stock Market	Intermediate Term Treasury	Long Term Treasury	Gold	Portfolio 1
US Stock Market	-	0.07	0.05	0.04	0.63
Intermediate Term Treasury	0.07	-	0.89	0.09	0.68
Long Term Treasury	0.05	0.89	-	0.06	0.71
Gold	0.04	0.09	0.06	-	0.44

Portfolio Return Decomposition

Name	Portfolio 1
US Stock Market	\$1,615,175
Intermediate Term Treasury	\$316,274
Long Term Treasury	\$1,257,321
Gold	\$382,791

Portfolio Risk Decomposition

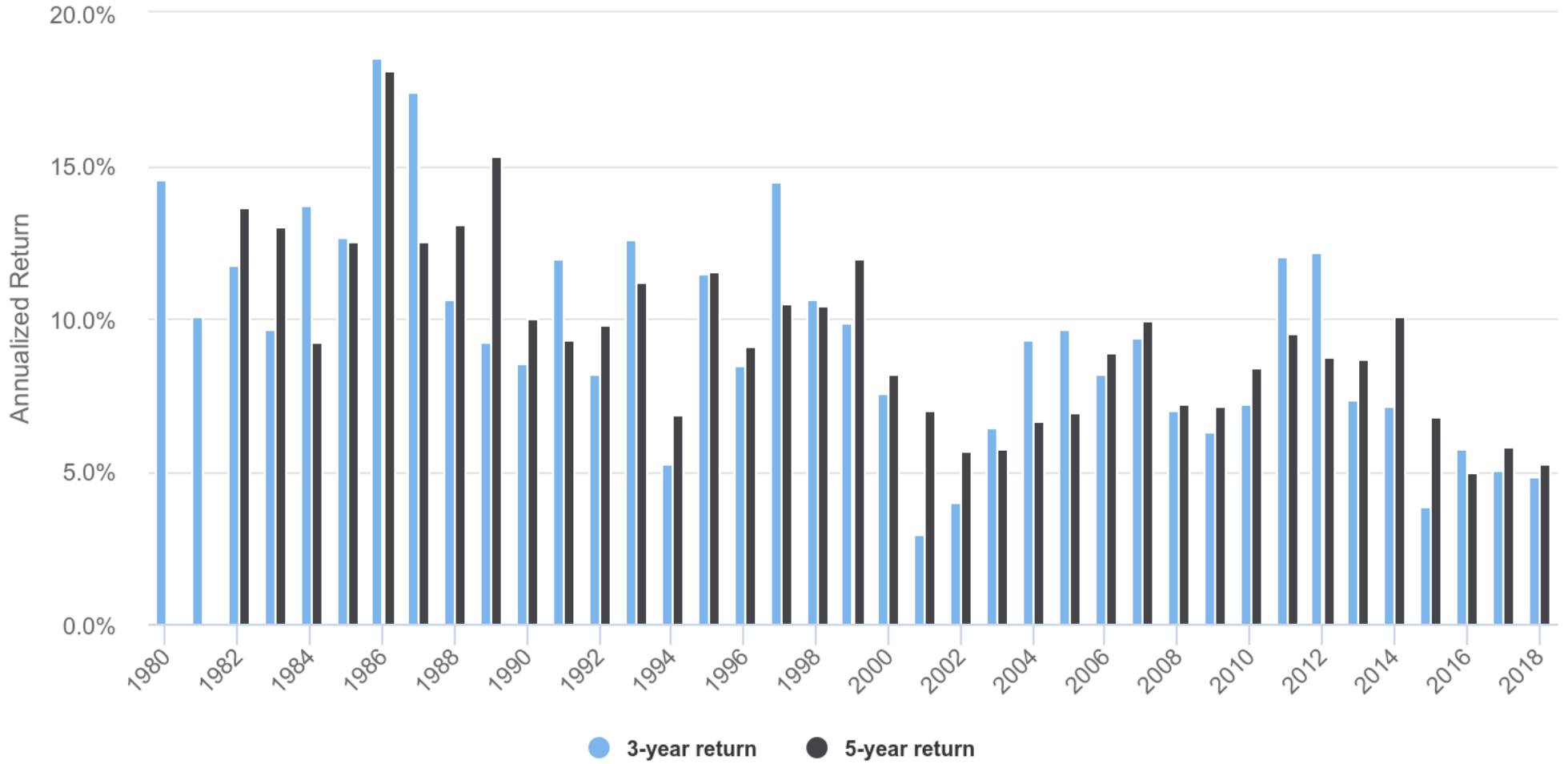
Name	Portfolio 1
US Stock Market	36.53%
Intermediate Term Treasury	7.80%
Long Term Treasury	39.68%
Gold	16.00%

Rolling Returns

Roll Period	Average	High	Low
1 year	9.56%	31.90%	-4.46%
3 years	9.38%	18.54%	2.95%
5 years	9.45%	18.11%	4.97%
7 years	9.44%	14.34%	4.83%
10 years	9.36%	13.61%	6.48%
15 years	9.21%	12.42%	7.04%

Result statistics are based on annualized rolling returns over full calendar year periods

Portfolio 1 Rolling Returns



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 2019 are based on full calendar months from January to February
- CAGR = Compound Annual Growth Rate
- TWRR = Annualized time weighted rate of return
- MWRR = Annualized money weighted rate of return (internal rate of return) taking into account the periodic cashflows
- 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 treasury bill)
- Stock market correlation is based on the correlation of monthly returns
- Drawdowns are calculated based on monthly returns
- The backtested results include annual rebalancing of portfolio assets to match the specified allocation
- The results use total return and assume that all dividends and distributions are reinvested. Taxes and transaction fees are not included
- Inflation adjusted monthly contribution of \$500 was applied at the end of each period. This is reflected in the CAGR and maximum drawdown shown above.