DUAL MOMENTUM SYSTEMS

Process driven investment decisions driving better long term results with more shallow drawdowns and better risk adjusted performance.



Disclosure

Nothing in this report should be construed as investment advice, an offer, recommendation, or solicitation to buy or sell any investment. All investing involves risk, including the possible loss of money you invest, and past performance does not guarantee future performance.

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Investment Strategies Investments for the month of May 31, 2024

Strategy Components Invested:

Aggressive \rightarrow

Month	HedgeFundie	MAX PAIN	Profit Farmer
May 2023	55% UPRO 45% TMF	3X S&P 500	38.97% EDC 18.5% TQQQ 42.53% TMF
Jun 2023	55% UPRO 45% TMF	3X S&P 500	28.15% URTY 22.11% TQQQ 49.74% TMF
Jul 2023	55% UPRO 45% TMF	3X S&P 500	50.19% EDC 14.15% URTY 35.66% TQQQ
Aug 2023	55% UPRO 45% TMF	3X S&P 500	19.06% EDC 28.26% URTY 52.68% TQQQ
Sep 2023	55% UPRO 45% TMF	3X S&P 500	24.25% EDC 52.61% URTY 23.14% TQQQ
Oct 2023	55% UPRO 45% TMF	3X Long Term Treasuries	47.69% EDC 9.86% TQQQ 42.45% DRN
Nov 2023	55% UPRO 45% TMF	Extended Duration Treasuries	73.74% EDC 11.96% TQQQ 14.3% DRN
Dec 2023	55% UPRO 45% TMF	3X S&P 500	68.3% EDC 31.7% TQQQ
Jan 2024	55% UPRO 45% TMF	3X S&P 500	22.1% URTY 68.18% TMF 9.72% DRN
Feb 2024	55% UPRO 45% TMF	3X S&P 500	57.76% TQQQ 42.24% TMF
Mar 2024	55% UPRO 45% TMF	3X S&P 500	58.03% EDC 41.97% TQQQ
Apr 2024	55% UPRO 45% TMF	3X S&P 500	70.42% EDC 29.58% TQQQ
May 2024	55% UPRO 45% TMF	3X S&P 500	89.52% EDC 6.19% URTY 4.29% TQQQ

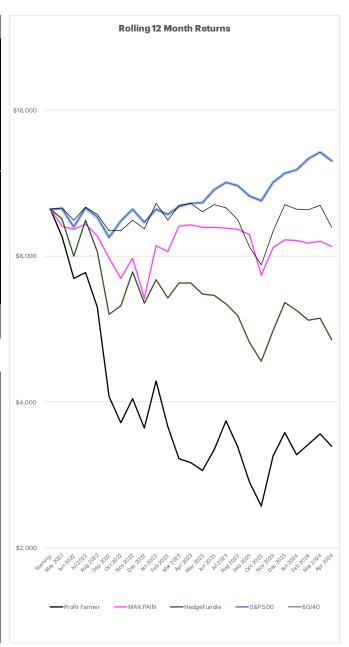
For May, here are the investments by strategy:

Investment Strategies

Rolling 12 Month Returns Through April 30, 2024

Returns and Maximum Drawdown:										
	US Market	Balanced								
Month	S&P500	60/40	HedgeFundie		MAXPAIN					
May 2022	0.23%	0.47%	-4.74%	-12.14%	-7.94%					
Jun 2022	-8.25%	-5.61%	-16.11%	-18.08%	-1.42%					
Jul 2022	9.21%	6.48%	18.66%	2.66%	2.38%					
Aug 2022	-4.08%	-3.57%	-13.86%	-15.05%	-5.15%					
Sep 2022	-9.24%	-7.22%	-25.76%	-34.63%	-10.20%					
Oct 2022	8.13%	0.00%	4.23%	-11.77%	-9.10%					
Nov 2022	5.56%	4.80%	17.55%	12.27%	10.08%					
Dec 2022	-5.76%	-3.78%	-13.94%	-13.08%	-17.36%					
Jan 2023	6.29%	12.70%	11.86%	25.22%	28.28%					
Feb 2023	-2.51%	-7.60%	-8.33%	-19.65%	-2.67%					
Mar 2023	3.71%	7.37%	7.26%	-14.03%	12.86%					
Apr 2023	1.60%	0.82%	0.17%	-1.93%	0.59%					
May 2023	0.46%	-3.93%	-5.37%	-3.44%	-1.16%					
Jun 2023	6.48%	3.52%	-0.54%	10.22%	-0.22%					
Jul 2023	3.27%	-1.53%	-3.99%	14.82%	-0.12%					
Aug 2023	-1.63%	-5.36%	-5.30%	-11.67%	-0.66%					
Sep 2023	-4.74%	-12.16%	-11.84%	-15.63%	-2.48%					
Oct 2023	-2.17%	-8.27%	-8.68%	-10.62%	-17.43%					
Nov 2023	9.13%	17.24%	15.73%	26.78%	14.03%					
Dec 2023	4.57%	13.67%	14.25%	11.99%	3.55%					
Jan 2024	1.59%	-2.34%	-3.80%	-10.00%	-0.16%					
Feb 2024	5.22%	-0.22%	-4.52%	4.93%	-1.36%					
Mar 2024	3.27%	2.37%	0.92%	5.17%	0.85%					
Apr 2024	-4.03%	-10.17%	-9.77%	-5.89%	-2.41%					
24 Mo Rtrn:	25.72%	-8.43%	-46.32%	-67.63%	-16.35%					
CAGR	12.13%	-4.31%	-26.74%	-43.10%	-8.54%					
Max DD:	-12.94%	-25.32%	-51.46%	-75.61%	-34.56%					
b/(w) S&P 500:	0.0%	-34.1%	-72.0%	-93.4%	-42.1%					

510,000 turns into:								
	US Market	Balanced						
Month	S&P 500	60/40	He	dgeFundie	Pro	fit Farmer	N	IAX PAIN
Starting:	\$ 10,000	\$ 10,000	\$	10,000	\$	10,000	\$	10,000
May 2022	\$ 10,023	\$ 10,047	\$	9,526	\$	8,786	\$	9,206
Jun 2022	\$ 9,196	\$ 9,483	\$	7,991	\$	7,197	\$	9,075
Jul 2022	\$ 10,043	\$ 10,097	\$	9,483	\$	7,388	\$	9,291
Aug 2022	\$ 9,633	\$ 9,737	\$	8,168	\$	6,277	\$	8,813
Sep 2022	\$ 8,743	\$ 9,034	\$	6,064	\$	4,103	\$	7,914
Oct 2022	\$ 9,454	\$ 9,034	\$	6,321	\$	3,620	\$	7,194
Nov 2022	\$ 9,980	\$ 9,468	\$	7,430	\$	4,065	\$	7,919
Dec 2022	\$ 9,405	\$ 9,110	\$	6,394	\$	3,533	\$	6,544
Jan 2023	\$ 9,996	\$ 10,267	\$	7,153	\$	4,424	\$	8,395
Feb 2023	\$ 9,745	\$ 9,487	\$	6,557	\$	3,554	\$	8,171
Mar 2023	\$ 10,107	\$ 10,186	\$	7,033	\$	3,056	\$	9,221
Apr 2023	\$ 10,269	\$ 10,270	\$	7,045	\$	2,997	\$	9,276
May 2023	\$ 10,316	\$ 9,867	\$	6,667	\$	2,894	\$	9,168
Jun 2023	\$ 10,984	\$ 10,213	\$	6,631	\$	3,189	\$	9,148
Jul 2023	\$ 11,344	\$ 10,058	\$	6,367	\$	3,662	\$	9,137
Aug 2023	\$ 11,159	\$ 9,518	\$	6,029	\$	3,235	\$	9,077
Sep 2023	\$ 10,630	\$ 8,361	\$	5,315	\$	2,729	\$	8,852
Oct 2023	\$ 10,399	\$ 7,669	\$	4,854	\$	2,439	\$	7,309
Nov 2023	\$ 11,349	\$ 8,991	\$	5,617	\$	3,093	\$	8,334
Dec 2023	\$ 11,867	\$ 10,220	\$	6,418	\$	3,464	\$	8,630
Jan 2024	\$ 12,056	\$ 9,981	\$	6,174	\$	3,117	\$	8,616
Feb 2024	\$ 12,685	\$ 9,958	\$	5,895	\$	3,271	\$	8,499
Mar 2024	\$ 13,100	\$ 10,194	\$	5,949	\$	3,440	\$	8,571
Apr 2024	\$ 12,572	\$ 9,157	\$	5,368	\$	3,237	\$	8,365



Investment Strategies

1980 through April 30, 2024

Annual returns:

Annuairetu		Benchmark	(S	Dual Momentum				
	US Market	Balanced	Nasdag 100					
Year End	S&P 500	60/40	QQQ		HedgeFundie	MAX PAIN	Profit Farmer	
1980	32.49%	21.02%	0.00%		45.72%	112.85%	0.00%	
1981	-4.90%	0.07%	0.00%		-13.21%	17.16%	0.00%	
1982	21.55%	25.68%	0.00%		104.69%	134.42%	0.00%	
1983	22.55%	16.21%	0.00%		33.46%	107.36%	0.00%	
1984	6.25%	9.84%	0.00%		25.80%	8.11%	0.00%	
1985	31.23%	27.65%	0.00%		122.87%	87.51%	0.00%	
1986	18.05%	17.65%	0.00%		68.99%	37.57%	0.00%	
1987	4.68%	4.81%	0.00%		-2.02%	-45.08%	-18.83%	
1988	16.22%	12.64%	0.00%		37.21%	23.23%	56.44%	
1989	31.38%	24.20%	0.00%		86.89%	73.31%	30.16%	
1990	-3.32%	1.56%	0.00%		-4.70%	-31.86%	-17.86%	
1991	30.22%	24.30%	0.00%		90.44%	89.45%	166.45%	
1992	7.40%	7.35%	0.00%		23.25%	23.14%	53.18%	
1993	9.58%	9.66%	0.00%		40.42%	44.23%	63.89%	
1994	0.38%	-0.77%	0.00%		-10.94%	-15.76%	-22.12%	
1995	38.05%	29.81%	0.00%		133.08%	96.18%	120.13%	
1996	22.51%	14.70%	0.00%		33.24%	24.90%	16.68%	
1997	33.49%	23.58%	0.00%		78.35%	73.59%	85.81%	
1998	28.69%	21.01%	0.00%		71.42%	4.10%	25.04%	
1999	20.39%	11.65%	0.00%		14.82%	12.88%	61.90%	
2000	-9.74%	-1.49%	0.00%		2.12%	58.06%	98.51%	
2001	-11.75%	-3.81%	0.00%		-18.16%	5.80%	22.72%	
2002	-21.59%	-9.80%	0.00%		-20.45%	19.08%	-6.68%	
2003	28.16%	18.19%	0.00%		49.04%	222.74%	163.96%	
2004	10.71%	8.00%	0.00%		29.13%	39.62%	44.50%	
2005	4.83%	3.87%	0.00%		20.71%	-8.55%	52.20%	
2006	15.84%	10.95%	0.00%		24.73%	55.90%	57.12%	
2007	5.14%	5.94%	0.00%		19.86%	9.98%	-19.18%	
2008	-36.81%	-21.86%	0.00%		-42.86%	48.69%	17.52%	
2009	26.38%	18.66%	0.00%		-4.88%	23.19%	5.06%	
2010	15.06%	12.04%	0.00%		43.94%	38.95%	21.52%	
2011	1.88%	4.38%	0.00%		45.73%	60.10%	80.37%	
2012	16.00%	11.39%	0.00%		31.69%	47.10%	11.19%	
2013	32.31%	17.44%	0.00%		29.66%	149.93%	114.09%	
2014	13.48%	10.56%	0.00%		64.08%	27.61%	56.48%	
2015	1.26%	1.11%	0.00%		-2.45%	-17.34%	4.30%	
2016	12.00%	8.34%	0.00%		19.88%	58.20%	50.27%	
2017	21.71%	14.26%	0.00%		51.13%	23.68%	61.33%	
2018	-4.56%	-2.47%	0.00%		-13.56%	8.78%	7.79%	
2019	31.23%	21.98%	0.00%		81.31%	27.64%	21.26%	
2020	18.39%	14.93%	0.00%		49.80%	120.14%	101.69%	
2021	28.76%	15.74%	0.00%		36.12%	82.82%	108.84%	
2022	-18.16%	-15.86%	0.00%		-63.22%	-63.67%	-80.51%	
2023	26.18%	12.18%	0.00%		0.36%	31.88%	-1.96%	
2024	5.94%	-10.62%	0.00%		-16.28%	-3.07%	-6.62%	
+/- S&P YTD:	0.0%	-16.6%	-5.9%		-22.2%	-9.0%	-12.6%	
CAGR	11.7%	9.3%	12.0%		24.4%	33.9%	0.0%	



Strategy Fact Sheets

Sort of a highly leverged 60/40 Portfolio as prescribed by HedgeFundie on Bogleheads

Investment selection for May 2024:

55% UPRO 45% TMF

Tax friendliness:

HedgeFundie unsure of short/long term taxes

Months between change of holdings

HedgeFundie as tracked here is rebalanced monthly.

Portfolio size appropriateness:

Whale, HedgeFundie can be used for any sized portfolio.

Characteristics:

Drawdowns: HedgeFundie has frequent and massive drawdowns.

Volatility: HedgeFundie is extremely volatile.

Returns: HedgeFundie has superior historical returns compared to the S&P 500.

HedgeFundie is always leveraged with 3X ETF's

Strategy Description:

HedgeFundie's Excellent Adventure threads on the Boglehead's forum has been active since 1st posted. HedgeFundie left after some point, tired of defending the strategy and being attacked, the strategy lives on. I track it out of curiosity, even though I find it to be a terrible strategy given it's performance adjusted metrics. People can dream.

Strategy Components

UPRO 3X S&P 500

TMF 3X Long Term Treasuries

Metric	2000+	1980+
Beta	1.45	1.70
Alpha	0.93%	4.83%

Annualized Returnsactual YTD for current year.

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Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+							
HedgeFundie	-16.28%	-23.81%	-25.34%	-3.17%	9.33%	11.07%	24.37%							
Balanced 60/40	-10.62%	-10.83%	-3.98%	3.26%	5.62%	5.09%	9.33%							
S&P 500	5.94%	22.43%	7.95%	13.12%	12.32%	7.11%	11.71%							

Maximum Drawdrown single largest drawdown.

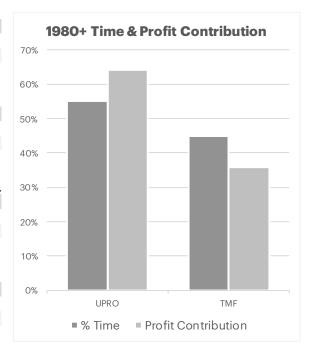
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	-16.36%	-31.10%	-72.08%	-72.08%	-72.08%	-72.08%	-72.08%
Balanced 60/40	-10.40%	-25.32%	-32.17%	-32.17%	-32.17%	-32.33%	-32.33%
S&P 500	-4.03%	-8.33%	-23.92%	-23.92%	-23.92%	-50.79%	-50.79%

Ulcer Index the higher the number the more painful downside volatility. Considers all downside not just maximum.

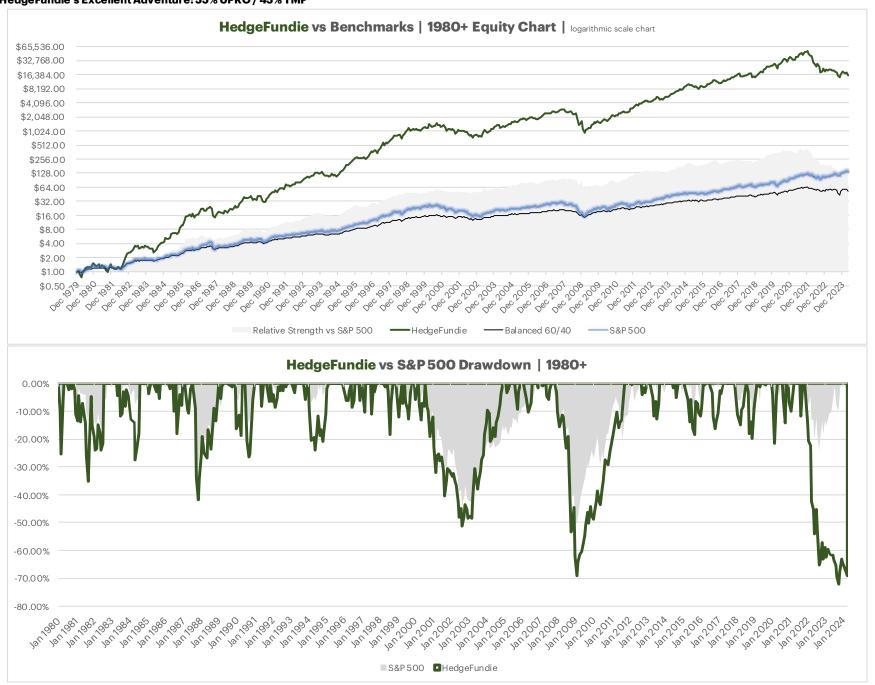
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	8.96	16.76	50.68	39.67	28.72	27.41	21.56
Balanced 60/40	4.90	10.19	13.23	10.47	7.55	8.63	6.73
S&P 500	1.80	3.14	9.91	8.39	6.40	16.35	12.82

Sortino Ratio, risk adjusted performance measure - bigger number is better.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	(3.23)	(2.45)	(1.97)	(1.62)	(1.63)	0.47	1.14
Balanced 60/40	(2.99)	(2.18)	(2.41)	(2.46)	(2.74)	0.05	0.59
S&P 500	(2.59)	(2.33)	(2.37)	(2.22)	(2.48)	0.25	0.67



HedgeFundie's Excellent Adventure: 55% UPRO / 45% TMF



USA Momentum Rotational always using triple leverage

Investment selection for May 2024:

3X S&P 500

Tax friendliness:

MAX PAIN has mostly Short Term Cap Gains.

Months between change of holdings

MAX PAIN changes it's holdings every 2.5 months on average.

Portfolio size appropriateness:

Small Fry, MAX PAIN is only suitable for < \$500,000 allocations.

Characteristics:

Drawdowns: MAX PAIN has frequent and larger drawdowns than the S&P.

Volatility: MAX PAIN is far more volatile than the S&P over time.

Returns: MAX PAIN has incredibly huge historical returns compared to the S&P 500. Leverage: MAX PAIN has a maximum leverage of 300% and average leverage of: 258%

Strategy Description:

MAX PAIN invests in the United States, going into the 3X leveraged version of the best performer of the Russell 1000, Russell MidCap Growth, or Russell Small Cap. When these markets aren't experiencing positive momentum the strategy goes into 3X Long Term Treasuries. This is an extremely high return strategy with equally high volatility and frequent drawdowns, know what you're getting into.

Strategy Components

URTY 3X Russell 2000, MIDU 3X S&P MidCap 400, UPRO 3X S&P 500 TMF 3X Long Term Treasuries, 1st month in treasuries EDV Extended Duration Treasuries, subsequent months in treasuries

Metric	2000+	1980+
Beta	1.04	1.57
Alpha	26.12%	15.82%

Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+		
MAX PAIN	-3.07%	-9.82%	-15.71%	15.06%	17.46%	33.49%	33.93%		
Balanced 60/40	-10.62%	-10.83%	-3.98%	3.26%	5.62%	5.09%	9.33%		
S&P 500	5.94%	22.43%	7.95%	13.12%	12.32%	7.11%	11.71%		

Maximum Drawdrown, single largest drawdown.

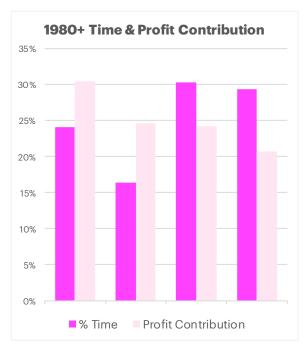
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	-3.07%	-21.21%	-63.67%	-63.67%	-63.67%	-63.67%	-67.06%
Balanced 60/40	-10.40%	-25.32%	-32.17%	-32.17%	-32.17%	-32.33%	-32.33%
S&P 500	-4.03%	-8.33%	-23.92%	-23.92%	-23.92%	-50.79%	-50.79%

Ulcer Index the higher the number the more painful downside volatility. Considers all downside not just maximum.

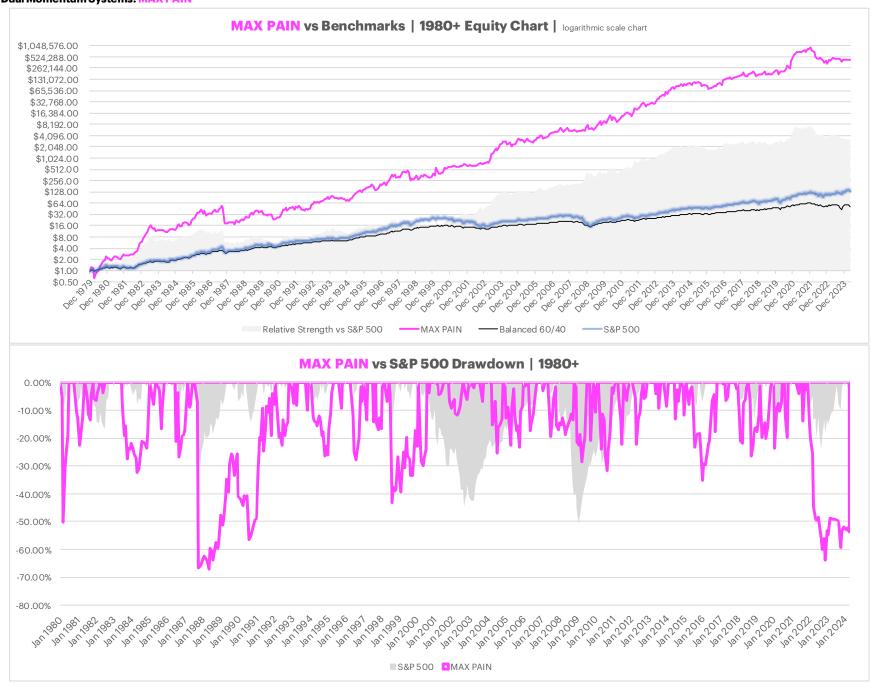
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	1.56	8.35	43.63	34.67	26.48	19.10	22.19
Balanced 60/40	4.90	10.19	13.23	10.47	7.55	8.63	6.73
S&P 500	1.80	3.14	9.91	8.39	6.40	16.35	12.82

Sortino Ratio, risk adjusted performance measure - bigger number is better.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	(3.40)	(2.43)	(1.93)	(1.09)	(1.21)	1.46	1.35
Balanced 60/40	(2.99)	(2.18)	(2.41)	(2.46)	(2.74)	0.05	0.59
S&P 500	(2.59)	(2.33)	(2.37)	(2.22)	(2.48)	0.25	0.67



Dual Momentum Systems: MAX PAIN



A Minimum Variance Adaptive Asset Allocation strategy by Private Farmer

Investment selection for May 2024:

89.52% EDC 6.19% URTY 4.29% TQQQ

Tax friendliness:

Profit Farmer has all Short Term Cap Gains.

Months between change of holdings

Profit Farmerchanges it's holdings virtually every month.

Portfolio size appropriateness:

Small Fry, Profit Farmer is only suitable for < \$500,000 allocations.

Characteristics:

Drawdowns: **Profit Farmer** has frequent and larger drawdowns than the S&P.

Volatility: **Profit Farmer** is far more volatile than the S&P over time.

Returns: Profit Farmer has incredibly huge historical returns compared to the S&P 500.

Strategy Description:

Profit Farmer is a Minimum Variance Adaptive Asset Allocation strategy, it is not a DMS strategy, but created by a friend of DMS. I track it because I have invested in it myself. Profit Farmer is always leveraged to 300%.

Strategy Components

EDC 3X Emerging Markets URTY 3X Russell 2000 TQQQ 3X Nasdaq 100 TMF 3X Long Term Treasuries DRN 3X Real Estate

Metric	2000+	05/1987+
Beta	1.33	1.37
Alpha	18.86%	22.41%

Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	-6.62%	8.02%	-37.57%	-3.54%	13.76%	28.17%	31.97%
MAX PAIN	-3.07%	-9.82%	-15.71%	15.06%	17.46%	33.49%	28.70%
S&P 500	5.94%	22.43%	7.95%	13.12%	12.32%	7.11%	10.24%

Maximum Drawdrown, single largest drawdown.

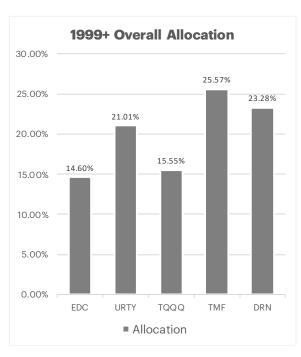
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	-10.00%	-33.39%	-86.54%	-86.54%	-86.54%	-86.54%	-86.54%
MAX PAIN	-3.07%	-21.21%	-63.67%	-63.67%	-63.67%	-63.67%	-67.06%
S&P 500	-4.03%	-8.33%	-23.92%	-23.92%	-23.92%	-50.79%	-50.79%

Ulcer Index the higher the number the more painful downside volatility. Considers all downside not just maximum.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	5.90	14.39	64.00	50.09	36.04	26.74	22.85
MAX PAIN	1.56	8.35	43.63	34.67	26.48	19.10	23.39
S&P 500	1.80	3.14	9.91	8.39	6.40	16.35	13.86

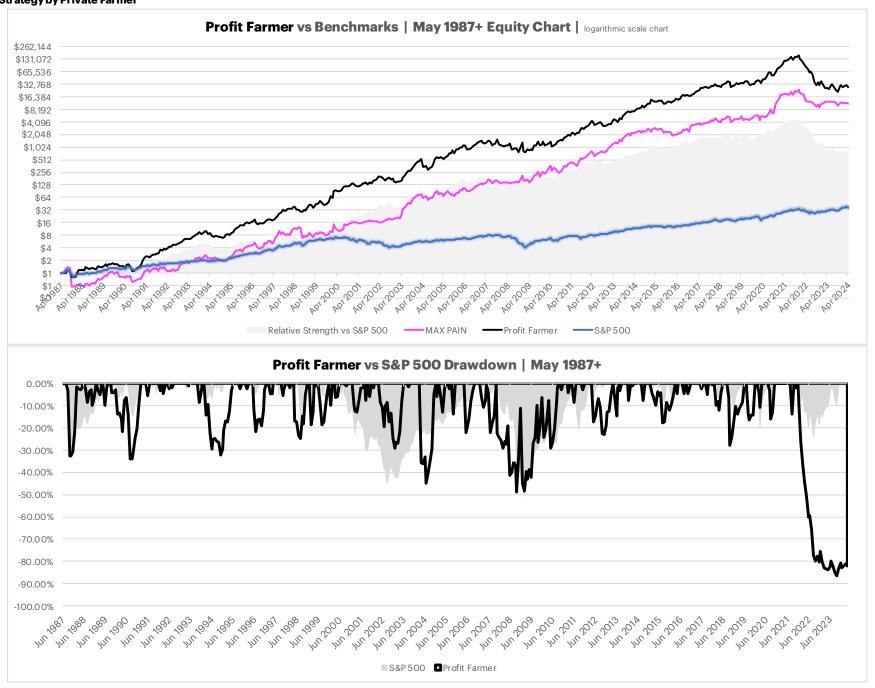
Sortino Ratio, risk adjusted performance measure - bigger number is better.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	(2.48)	(1.27)	(1.93)	(1.35)	(1.28)	1.10	1.29
MAX PAIN	(3.40)	(2.43)	(1.93)	(1.09)	(1.21)	1.46	1.17
S&P 500	(2.59)	(2.33)	(2.37)	(2.22)	(2.48)	0.25	0.53



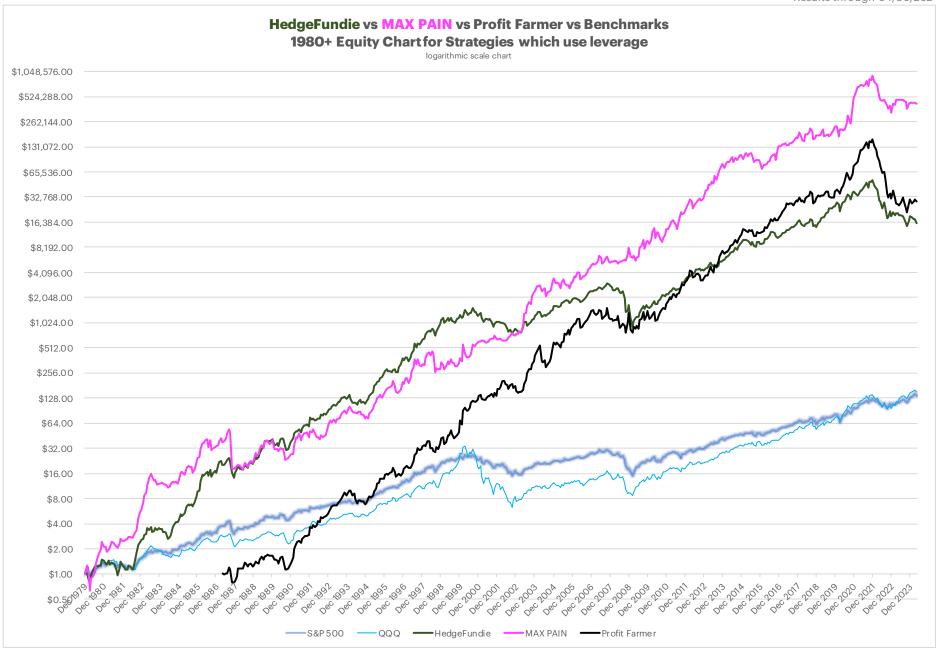
Profit Farmer, an Adaptive Asset Allocation by Private Farmer

Strategy by Private Farmer



DUAL MOMENTUM SYSTEMS

Equity Chart



^{*}Profit Farmer returns only back through May 1987



Metrics, Annual Returns and Correlations

CAGR: Compound Annual Growth Rate, on average how much the strategy has returned per year

Ulcer Performance Index: A risk adjusted performance ratio which uses the Ulcer Index in it's calculations

Sortino Ratio: A risk adjusted performance ratio commonly used

Gain to Pain: Used by the famous Jack Schwager, simply the total net gain divided by net loses along the way

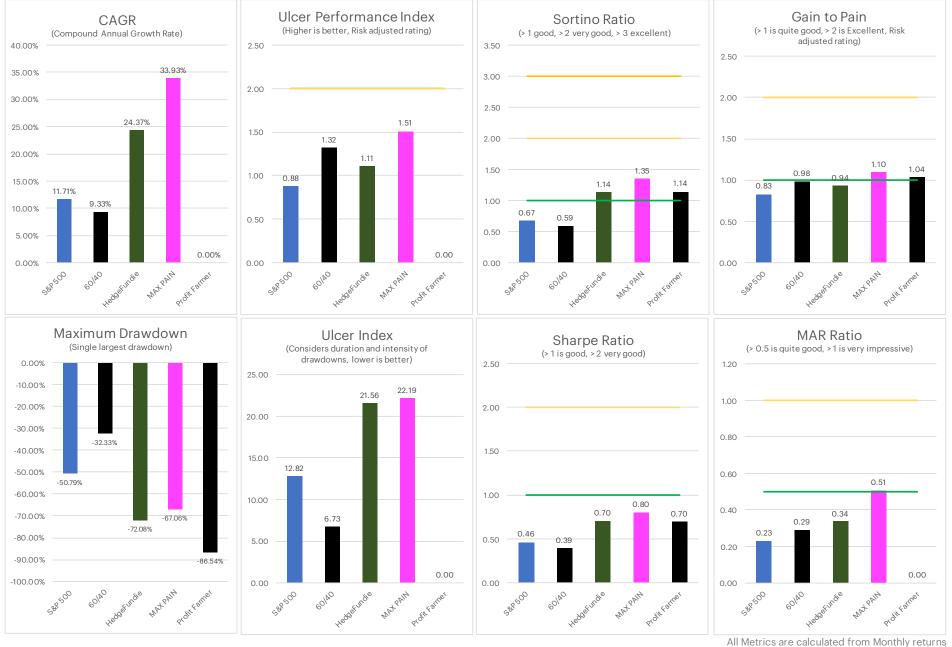
Maximum Drawdown: The largest negative drawdown for the strategy, on a month end basis

Ulcer Index: Measures how bad drawdowns are for an investment, not related to gains, just drawdowns

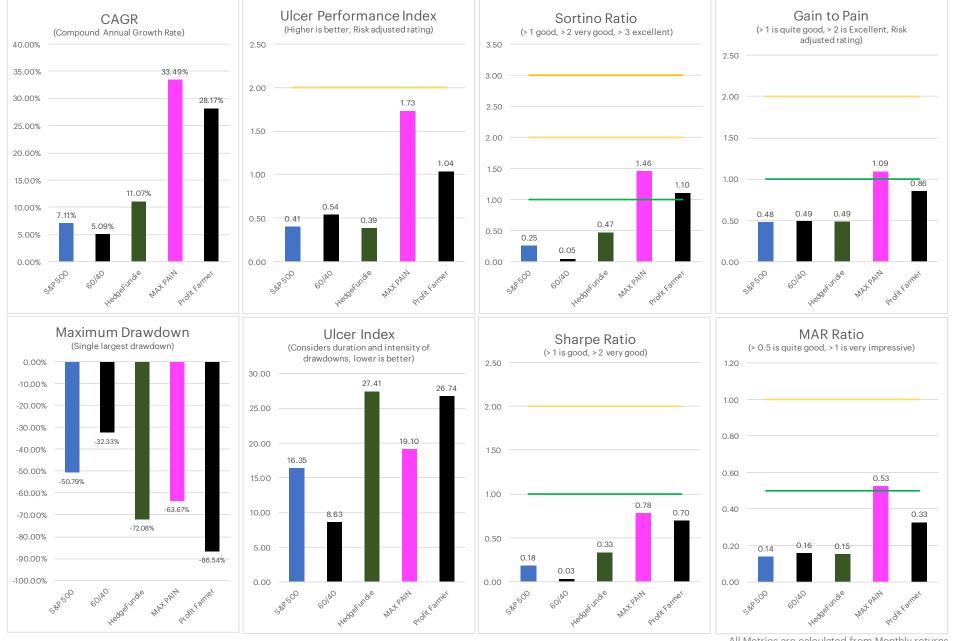
Sharpe Ratio: A commonly used risk adjusted performance measure, however, it penalizes for upside volatility

MAR Ratio: A risk adjusted performance ratio, uses maximum drawdown in it's calculations

"Long Term" Metrics Comparisons: Strategies vs S&P 500 & 60/40 1980 to current



"Modern Era" Metrics Comparisons: Strategies vs S&P 500 & 60/40 2000 to current



36 Month Strategy Return Correlations

 \leftarrow Aggressive

	S&P 500	Balanced 60/40	QQQ	LT Gain 3X	HedgeFundie	MAX PAIN
S&P 500	100%					
Balanced 60/40	78%	100%				
QQQ	92%	75%	100%			
LT Gain 3X	0%	0%	0%	0%		
HedgeFundie	90%	89%	82%	0%	100%	
MAX PAIN	67 %	73%	67 %	О%	75%	100%



Thank you for your time, my hope is that these strategies may help you grow your investments more than a market index fund, with less drawdowns along the way.

Countless hours of thought, development, and modeling have gone into these strategies which were inspired from the work of Gary Antonacci at www.OptimalMomentum.com. I have entrusted my invested net worth into these strategies, I am not looking to gain from anybody else who chooses to use them, I simply want to share what I think are fantastic ways to invest money for the long run. Receive the strategy information free by emailing me and getting on the distribution list, your information is kept private.

DMCK.



Extended Data & Out of Sample

Extended Data

The strategies use ETF monthly total return data. Leveraged ETF data is used as far back as it is available, it is simulated using the available daily return total data to extend the leverage returns back in time. At this time, only the leveraged S&P 500 from 1970 through 1979 had to be simulated on monthly data instead of daily, if that information becomes available to me it will be updated. This deck is reporting back to 1980 for all strategies, I do have Global Navigator and LT Gain 3 back to 1970 but as mentioned the extended data for the 1970's should based on daily returns.

The Nasdaq 100 benchmark data is based on Nasdaq 100 back to 1986, however, it didn't exist or data can't be found before that time, so the Nasdaq Composite is used pre-1986 as a proxy. I couldn't reliably emulate Nasdaq 100 from Nasdaq comp.

In Sample, and Out of Sample

The strategies were created with available data from 2000 through the time each strategy was created. Because this data was available and used in the modeling of each strategy, it is considered "In Sample". "Out of Sample" is the periods that the strategy is looking at for which returns were not available when the strategies were created. 1980 through 2000, and from when the strategy was finalized forward is all out of sample.

Nothing was changed to any of the strategies after seeing the additional 20 years from 1980 through 2000, nor were any of the strategies changed or modified due to any returns which have resulted after the strategies were created. I use these strategies myself to invest my hard earned dollars in them, I don't want to fool anybody, most especially not myself by tweaking the strategies to handle some big incident better than it was originally designed to do, no data mining!