### **Investment Strategies**

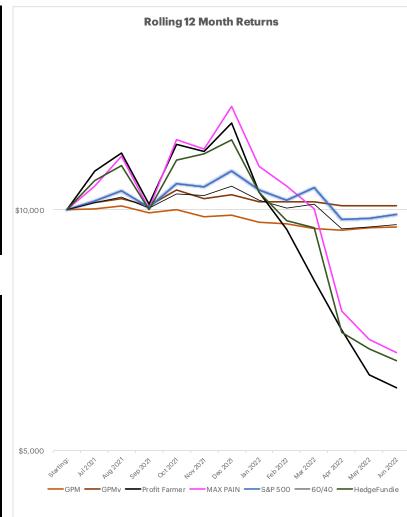
Rolling 12 Month Returns Through June 02, 2022

#### **Returns and Maximum Drawdown:**

Month	US Market	Balanced <b>60/40</b>	Nasdaq 100	GPM	GPMv	HedgeFundie	Profit Farmer	MAX PAIN
Jul 2021	2.44%	1.93%	2.86%	0.17%	1.96%	8.73%	11.76%	6.93%
Aug 2021	2.98%	1.71%	4.22%	0.87%	1.21%	4.32%	5.35%	8.97%
Sep 2021	-4.66%	-3.20%	-5.68%	-1.96%	-2.03%	-11.83%	-13.82%	-13.94%
Oct 2021	7.02%	4.24%	7.86%	1.00%	4.65%	15.23%	18.86%	21.90%
Nov 2021	-0.80%	-0.40%	2.00%	-2.06%	-2.55%	1.84%	-1.99%	-2.71%
Dec 2021	4.63%	2.65%	1.15%	0.30%	1.29%	4.13%	8.51%	13.13%
Jan 2022	-5.27%	-3.99%	-8.75%	-1.86%	-2.02%	-14.05%	-18.11%	-15.89%
Feb 2022	-2.95%	-2.23%	-4.48%	-0.43%	-0.06%	-7.88%	-10.05%	-5.48%
Mar 2022	3.76%	1.16%	4.67%	-1.40%	0.05%	-1.89%	-13.75%	-6.38%
Apr 2022	-8.78%	-6.85%	-13.60%	-0.50%	-1.13%	-25.96%	-13.18%	-25.41%
May 2022	0.23%	0.47%	-1.59%	0.60%	0.03%	-4.74%	-12.14%	-7.94%
Jun 2022	1.31%	0.82%	0.36%	0.30%	0.02%	-3.27%	-3.63%	-3.61%
12 Mo Rtrn:	-1.28%	-4.16%	-12.40%	-4.92%	1.20%	-35.24%	-40.10%	-33.72%
Max DD:	-12.98%	-11.55%	-22.42%	-6.75%	-4.39%	-47.01%	-53.30%	-50.74%
b/(w) S&P 500:	0.0%	-2.9%	-11.1%	-3.6%	2.5%	-34.0%	-38.8%	-32.4%

#### \$10,000 turns into:

	US Market	Balanced	Nasdaq 100								
Month	S&P 500	60/40	QQQ	GPM	GPMv	Не	dgeFundie	Pro	ofit Farmer	M	AX PAIN
Starting:	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$	10,000	\$	10,000	\$	10,000
Jul 2021	\$ 10,244	\$ 10,193	\$ 10,286	\$ 10,017	\$ 10,196	\$	10,873	\$	11,176	\$	10,693
Aug 2021	\$ 10,549	\$ 10,368	\$ 10,720	\$ 10,105	\$ 10,319	\$	11,342	\$	11,774	\$	11,652
Sep 2021	\$ 10,058	\$ 10,036	\$ 10,111	\$ 9,907	\$ 10,110	\$	10,001	\$	10,147	\$	10,028
Oct 2021	\$ 10,764	\$ 10,461	\$ 10,906	\$ 10,006	\$ 10,580	\$	11,524	\$	12,060	\$	12,224
Nov 2021	\$ 10,678	\$ 10,420	\$ 11,124	\$ 9,800	\$ 10,310	\$	11,736	\$	11,820	\$	11,893
Dec 2021	\$ 11,172	\$ 10,696	\$ 11,252	\$ 9,829	\$ 10,443	\$	12,220	\$	12,826	\$	13,454
Jan 2022	\$ 10,583	\$ 10,270	\$ 10,267	\$ 9,647	\$ 10,232	\$	10,503	\$	10,504	\$	11,316
Feb 2022	\$ 10,271	\$ 10,041	\$ 9,807	\$ 9,605	\$ 10,226	\$	9,675	\$	9,448	\$	10,696
Mar 2022	\$ 10,657	\$ 10,157	\$ 10,265	\$ 9,471	\$ 10,231	\$	9,492	\$	8,149	\$	10,014
Apr 2022	\$ 9,722	\$ 9,461	\$ 8,870	\$ 9,423	\$ 10,115	\$	7,028	\$	7,075	\$	7,469
May 2022	\$ 9,744	\$ 9,506	\$ 8,729	\$ 9,480	\$ 10,118	\$	6,695	\$	6,216	\$	6,876
Jun 2022	\$ 9,872	\$ 9,584	\$ 8,760	\$ 9,508	\$ 10,120	\$	6,476	\$	5,990	\$	6,628



# **Investment Strategies**

1980 through June 02, 2022

	rns:	Development				Duel Managerte		
	110.14	Benchmark	-			Dual Momentu	m	
Year End	US Market <b>S&amp;P 500</b>	Balanced <b>60/40</b>	Nasdaq 100	GPM	GPMv	HedgeFundie	MAX PAIN	Profit Farmer
1980	32.49%	21.02%	33.38%	9.08%	12.65%	45.72%	112.85%	0.00%
1981	-4.90%	0.07%	-0.63%	6.69%	14.01%	-13.21%	17.16%	0.00%
1982	21.55%	25.68%	18.20%	31.54%	31.37%	104.69%	134.42%	0.00%
1983	22.55%	16.21%	19.58%	5.36%	7.49%	33.46%	107.36%	0.00%
1984	6.25%	9.84%	-13.19%	10.74%	18.76%	25.80%	8.11%	0.00%
1985	31.23%	27.65%	32.38%	28.39%	30.22%	122.87%	87.51%	0.00%
1986	18.05%	17.65%	10.83%	48.74%	46.84%	68.99%	37.57%	0.00%
1987	4.68%	4.81%	-11.38%	16.42%	21.42%	-2.02%	-45.08%	-18.83%
1988	16.22%	12.64%	19.47%	6.55%	9.15%	37.21%	23.23%	56.44%
1989	31.38%	24.20%	19.49%	16.78%	18.20%	86.89%	73.31%	30.16%
1990	-3.32%	1.56%	-17.55%	7.15%	3.24%	-4.70%	-31.86%	-17.86%
1991	30.22%	24.30%	46.97%	13.97%	13.22%	90.44%	89.45%	166.45%
1992	7.40%	7.35%	21.54%	9.41%	11.06%	23.25%	23.14%	53.18%
1993	9.58%	9.66%	15.37%	13.01%	14.43%	40.42%	44.23%	63.89%
1994	0.38%	-0.77%	-3.66%	-2.88%	-1.98%	-10.94%	-15.76%	-22.12%
1995	38.05%	29.81%	42.46%	24.20%	25.49%	133.08%	96.18%	120.13%
1996	22.51%	14.70%	23.41%	9.65%	13.58%	33.24%	24.90%	16.68%
1997	33.49%	23.58%	21.27%	9.79%	10.89%	78.35%	73.59%	85.81%
1998	28.69%	21.01%	32.17%	12.06%	17.43%	71.42%	4.10%	25.04%
1999	20.39%	11.65%	80.58%	12.89%	22.18%	14.82%	12.88%	61.90%
2000	-9.74%	-1.49%	-28.93%	7.93%	16.41%	2.12%	58.06%	98.51%
2001	-11.75%	-3.81%	-25.59%	7.21%	5.66%	-18.16%	5.80%	22.72%
2002	-21.59%	-9.80%	-29.86%	11.99%	15.38%	-20.45%	19.08%	-6.68%
2003	28.16%	18.19%	41.08%	6.27%	11.64%	49.04%	222.74%	163.96%
2004	10.71%	8.00%	9.84%	4.55%	9.76%	29.13%	39.62%	44.50%
2005	4.83%	3.87%	4.49%	10.61%	11.39%	20.71%	-8.55%	52.20%
2006	15.84%	10.95%	8.27%	13.73%	13.97%	24.73%	55.90%	57.12%
2007	5.14%	5.94%	9.44%	11.11%	9.72%	19.86%	9.98%	-19.18%
2008	-36.81%	-21.86%	-42.67%	12.83%	13.16%	-42.86%	48.69%	17.52%
2009	26.38%	18.66%	45.53%	3.80%	7.42%	-4.88%	23.19%	5.06%
2010	15.06%	12.04%	18.51%	9.91%	16.20%	43.94%	38.95%	21.52%
2011	1.88%	4.38%	-1.14%	25.62%	26.93%	45.73%	60.10%	80.37%
2012	16.00%	11.39%	15.46%	4.55%	4.04%	31.69%	47.10%	11.19%
2013	32.31%	17.44%	35.69%	6.55%	12.07%	29.66%	149.93%	114.09%
2014	13.48%	10.56%	16.11%	8.37%	9.74%	64.08%	27.61%	56.48%
2015	1.26%	1.11%	6.50%	-0.67%	-3.17%	-2.45%	-17.34%	4.30%
2016	12.00%	8.34%	7.39%	4.23%	3.67%	19.88%	58.20%	50.27%
2017	21.71%	14.26%	27.28%	10.21%	13.20%	51.13%	23.68%	61.33%
2018	-4.56%	-2.47%	-1.10%	5.57%	3.26%	-13.56%	8.78%	7.79%
2019	31.23%	21.98%	28.83%	10.23%	10.15%	81.31%	27.64%	21.26%
2020	18.39%	14.93%	43.75%	12.76%	10.91%	49.80%	120.14%	101.69%
2020	28.76%	15.74%	27.41%	4.07%	11.90%	36.12%	82.82%	108.84%
2022	-11.64%	-10.40%	-22.14%	-3.27%	-3.09%	-47.01%	-50.74%	-53.30%
+/- S&P YTD:	0.0%	1.2%	-10.5%	8.4%	8.5%	-35.4%	-39.1%	-41.7%
CAGR	11.7%	10.0%	11.0%	10.9%	13.0%	27.2%	35.8%	0.0%

## **Dual Momentum Strategies: HedgeFundie**

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

### Investment selection for July 2022:

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.	Metric	2000+
Volatility: HedgeFundie is extremely volatile.	Beta	1.40
Returns: HedgeFundie has superior historical returns compared to the S&P 500.	Alpha	5.39%
HedgeFundie has is always leveraged with 3X ETF's		

#### Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	-47.01%	-35.24%	9.47%	15.74%	21.06%	14.74%	27.15%
Balanced 60/40	-10.40%	-4.16%	8.59%	8.75%	9.17%	6.00%	10.01%
S&P 500	-11.64%	-1.28%	14.31%	13.46%	13.99%	6.69%	11.68%

#### Maximum Drawdrown single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	-47.01%	-47.01%	-47.01%	-47.01%	-47.01%	-69.09%	-69.09%
Balanced 60/40	-11.55%	-11.55%	-11.86%	-11.86%	-11.86%	-32.33%	-32.33%
S&P 500	-12.98%	-12.98%	-19.43%	-19.43%	-19.43%	-50.79%	-50.79%

Ulcer Index the higher t	<b>Ulcer Index</b> 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	32.05	23.74	14.97	12.81	10.19	22.09	17.70	
Balanced 60/40	7.97	5.91	4.20	3.63	2.71	7.64	5.95	
S&P 500	9.11	6.81	5.74	5.25	4.01	16.66	12.87	

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	(2.74)	(1.35)	0.10	0.31	0.55	0.91	1.58
Balanced 60/40	(2.41)	(1.51)	(0.42)	(0.46)	(0.53)	0.84	1.53
S&P 500	(2.06)	(0.93)	0.17	0.10	0.13	0.63	1.14

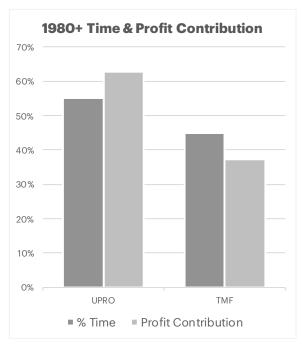
#### **Strategy Description:**

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.

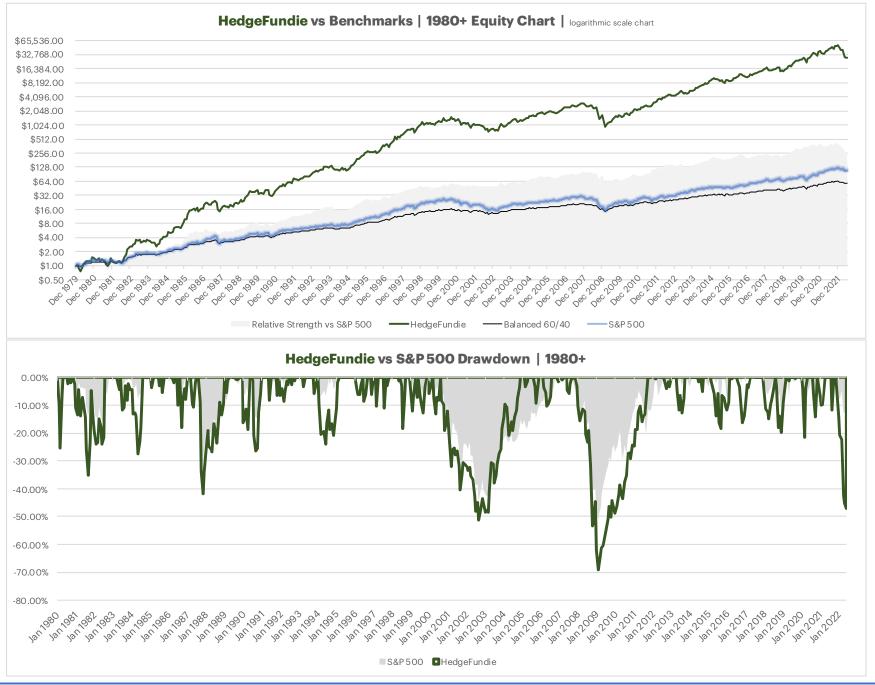
#### **Strategy Components**

UPRO 3X S&P 500 TMF 3X Long Term Treasuries

Metric	2000+	1980+
Beta	1.40	1.68
Alpha	5.39%	7.57%



HedgeFundie's Excellent Adventure [55/45] began in August 2019, out of sample after that time.



HedgeFundie's Excellent Adventure [55/45] began in August 2019, out of sample after that time.

## Dual Momentum Strategies: MAX PAIN

USA Momentum Rotational always using triple leverage

#### Investment selection for July 2022:

EDV. Extended Duration Treasuries

#### **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.

YTD

#### Characteristics:

Investment

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%

1 Year

#### Annualized Returns actual YTD for current year.

#### **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**

1980+

2000+

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	1.05	1.61
Alpha	29.99%	17.09%



MAX PAIN	-50.74%	-33.72%	36.92%	27.32%	32.82%	37.03%	35.81%
Balanced 60/40	-10.40%	-4.16%	8.59%	8.75%	9.17%	6.00%	10.01%
S&P 500	-11.64%	-1.28%	14.31%	13.46%	13.99%	6.69%	11.68%
Maximum Drawdrown	single largest o	łrawdown					

3 Year

5 Year

10 Year

muximum Bruwarowi	, single largest c						
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	-50.74%	-50.74%	-50.74%	-50.74%	-50.74%	-50.74%	-67.06%
Balanced 60/40	-11.55%	-11.55%	-11.86%	-11.86%	-11.86%	-32.33%	-32.33%
S&P 500	-12.98%	-12.98%	-19.43%	-19.43%	-19.43%	-50.79%	-50.79%

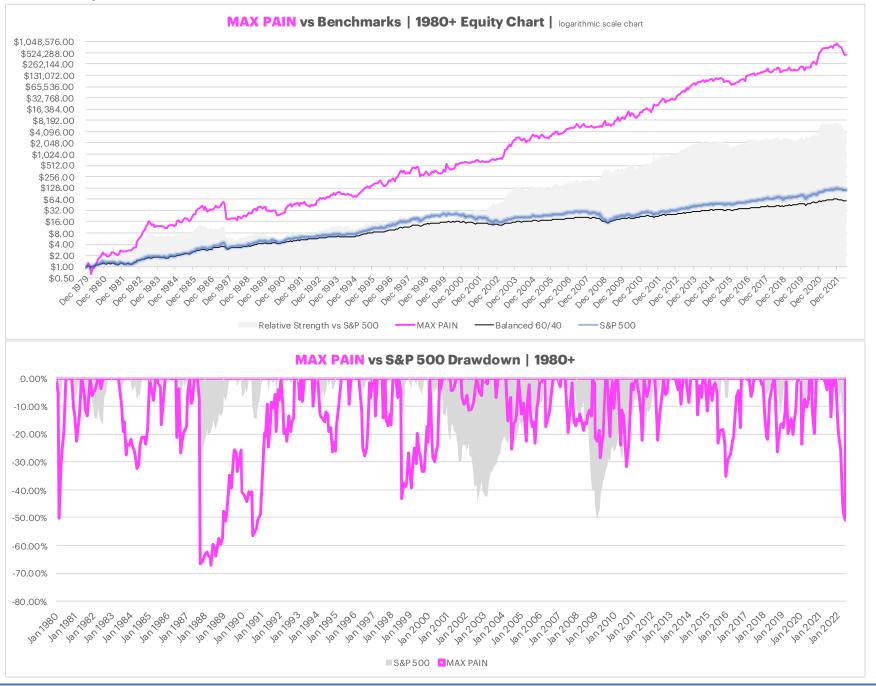
<b>Ulcer Index</b> the higher the number the more painful downside volatility. Considers all downside not just maximum.								
Investment	YTD	1 Year	3 Year	5 Year	<b>10 Year</b>	2000+	1980+	
MAX PAIN	34.37	25.53	16.40	15.73	13.83	12.85	19.81	
Balanced 60/40	7.97	5.91	4.20	3.63	2.71	7.64	5.95	
S&P 500	9.11	6.81	5.74	5.25	4.01	16.66	12.87	

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

Investment	YTD	1 Year	3 Year	5 Year	<b>10 Year</b>	2000+	1980+
MAX PAIN	(2.92)	(1.14)	1.15	0.81	1.02	1.83	1.62
Balanced 60/40	(2.41)	(1.51)	(0.42)	(0.46)	(0.53)	0.84	1.53
S&P 500	(2.06)	(0.93)	0.17	0.10	0.13	0.63	1.14

The MAX PAIN inception date January 2021, out of sample since then and before 2000.

#### **Dual Momentum Systems: MAX PAIN**



The MAX PAIN inception date January 2021, out of sample since then and before 2000.

## Dual Momentum Strategies: Profit Farmer

A Minimum Variance Adaptive Asset Allocation strategy by Private Farmer

#### **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 an allocation to it myself. Profit Farmer is always leveraged to 300%.

#### **Tax friendliness:**

Profit Farmer has all Short Term Cap Gains.

#### Months between change of holdings

Profit Farmer changes 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 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	1.24	1.31
Alpha	28.24%	28.89%

#### Annualized Returns actual YTD for current year.

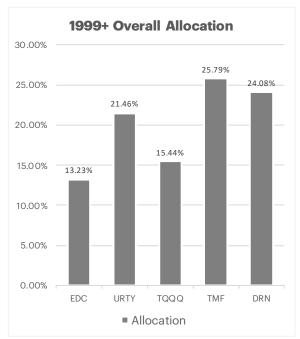
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
<b>Profit Farmer</b>	-53.30%	-40.10%	25.53%	23.13%	35.32%	36.50%	37.60%
MAX PAIN	-50.74%	-33.72%	36.92%	27.32%	32.82%	37.03%	30.62%
S&P 500	-11.64%	-1.28%	14.31%	13.46%	13.99%	6.69%	10.13%

Maximum Drawdrown single largest drawdown.									
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+		
<b>Profit Farmer</b>	-53.30%	-53.30%	-53.30%	-53.30%	-53.30%	-53.30%	-53.30%		
MAX PAIN	-50.74%	-50.74%	-50.74%	-50.74%	-50.74%	-50.74%	-67.06%		
S&P 500	-12.98%	-12.98%	-19.43%	-19.43%	-19.43%	-50.79%	-50.79%		

<b>Ulcer Index</b> 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	37.53	27.81	17.64	15.26	11.80	15.79	14.63	
MAX PAIN	34.37	25.53	16.40	15.73	13.83	12.85	20.71	
S&P 500	9.11	6.81	5.74	5.25	4.01	16.66	13.96	

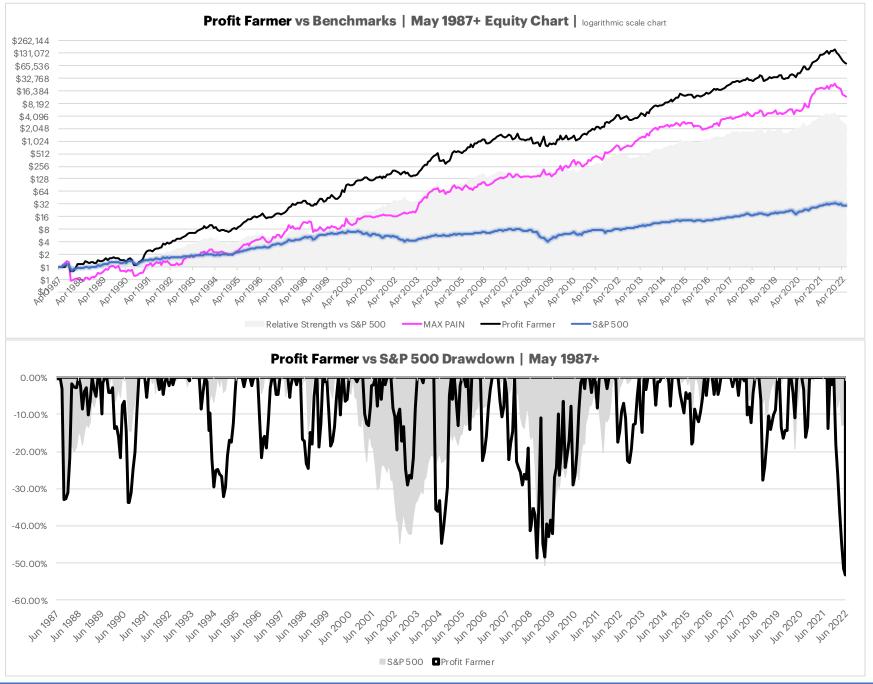
#### Sortino Ratio, risk adjusted performance measure - bigger number is better.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	(3.28)	(1.50)	0.73	0.62	1.17	1.67	1.80
MAX PAIN	(2.92)	(1.14)	1.15	0.81	1.02	1.83	1.43
S&P 500	(2.06)	(0.93)	0.17	0.10	0.13	0.63	0.96



Profit Farmer, an Adaptive Asset Allocation by Private Farmer

#### **Strategy by Private Farmer**



Profit Farmer, an Adaptive Asset Allocation by Private Farmer