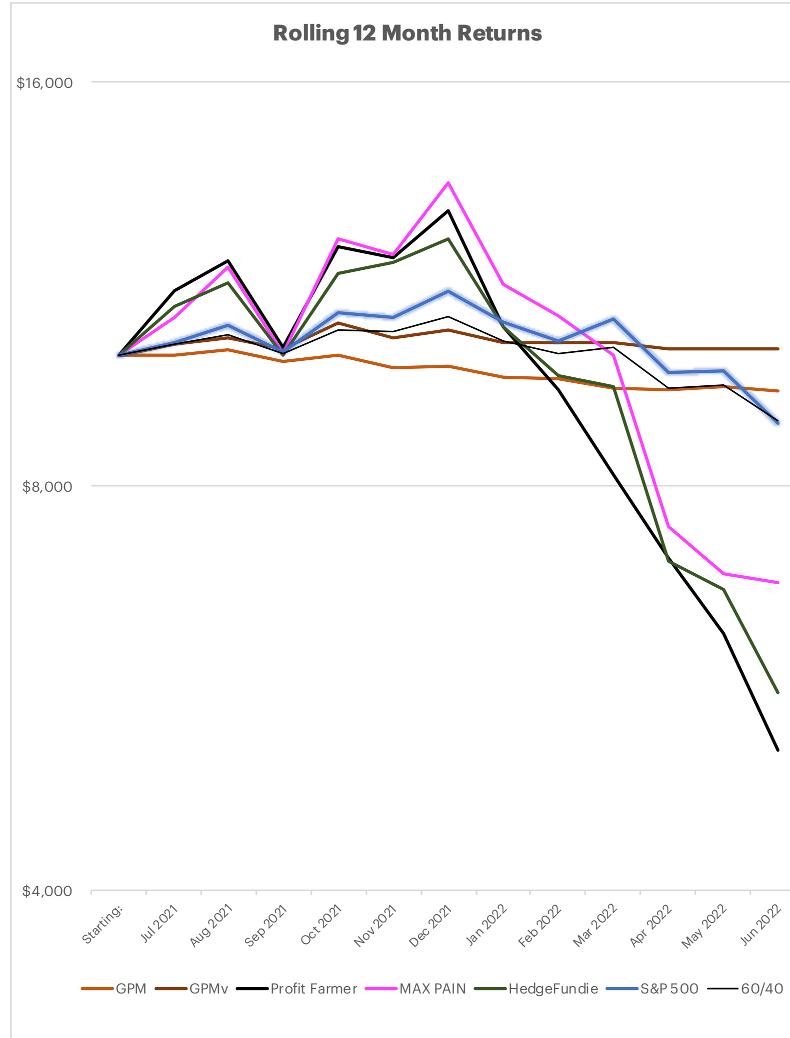
Investment Strategies
Rolling 12 Month Returns
Through June 30, 2022

Returns and Maximum Drawdown:

Month	US Market S&P 500	Balanced 60/40	Nasdaq 100 QQQ	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	-8.57%	-5.88%	-9.08%	-0.67%	0.04%	-16.16%	-18.17%	-1.42%
12 Mo Rtrn:	**-10.90%**	**-10.53%**	**-20.64%**	**-5.84%**	**1.23%**	**-43.87%**	**-49.14%**	**-32.22%**
Max DD:	-20.25%	-16.36%	-29.47%	-6.82%	-4.39%	-54.07%	-60.34%	-49.62%
b/(w) S&P 500:	0.0%	0.4%	-9.7%	5.1%	12.1%	-33.0%	-38.2%	-21.3%

$10,000 turns into:

Month	US Market S&P 500	Balanced 60/40	Nasdaq 100 QQQ	GPM	GPMv	HedgeFundie	Profit Farmer	MAX 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	$ 8,910	$ 8,947	$ 7,936	$ 9,416	$ 10,123	$ 5,613	$ 5,086	$ 6,778



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Investment Strategies

1980 through June 30, 2022

Annual returns:

	Benchmarks			Dual Momentum				
Year End	US Market S&P 500	Balanced 60/40	Nasdaq 100 QQQ	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%
2021	28.76%	15.74%	27.41%	4.07%	11.90%	36.12%	82.82%	108.84%
2022	-20.25%	-16.36%	-29.47%	-4.20%	-3.07%	-54.07%	-49.62%	-60.34%
+/- S&P YTD:	0.0%	3.9%	-9.2%	16.0%	17.2%	-33.8%	-29.4%	-40.1%
CAGR	11.4%	9.8%	10.7%	10.9%	13.0%	26.7%	35.9%	0.0%

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Dual Momentum Strategies: HedgeFundie

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

Results through 06/30/2022

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.
Volatility: **HedgeFundie** is extremely volatile.
Returns: **HedgeFundie** has superior historical returns compared to the S&P 500.
HedgeFundie has 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	1.41	1.68
Alpha	5.32%	7.61%

Annualized Returns, actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	-54.07%	-43.87%	4.37%	12.48%	19.34%	14.02%	26.72%
Balanced 60/40	-16.36%	-10.53%	6.13%	7.26%	8.42%	5.67%	9.83%
S&P 500	-20.25%	-10.90%	10.47%	11.16%	12.83%	6.21%	11.41%

Maximum Drawdown, single largest drawdown.

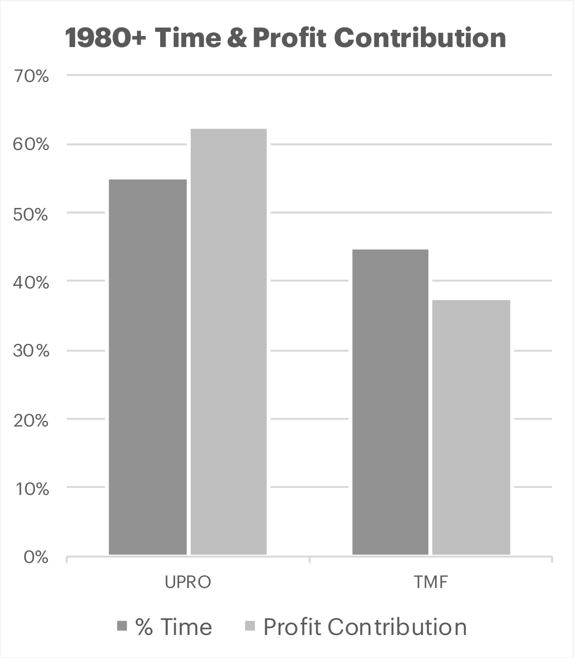
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	-54.07%	-54.07%	-54.07%	-54.07%	-54.07%	-69.09%	-69.09%
Balanced 60/40	-16.36%	-16.36%	-16.36%	-16.36%	-16.36%	-32.33%	-32.33%
S&P 500	-20.25%	-20.25%	-20.25%	-20.25%	-20.25%	-50.79%	-50.79%

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	33.60	24.87	15.60	13.26	10.48	22.15	17.74
Balanced 60/40	9.29	6.87	4.69	3.97	2.94	7.67	5.98
S&P 500	11.06	8.22	6.35	5.67	4.28	16.70	12.89

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
HedgeFundie	(2.98)	(1.70)	(0.37)	(0.18)	(0.00)	0.82	1.50
Balanced 60/40	(2.91)	(2.17)	(1.29)	(1.33)	(1.51)	0.65	1.35
S&P 500	(2.66)	(1.70)	(0.63)	(0.65)	(0.72)	0.51	1.03



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

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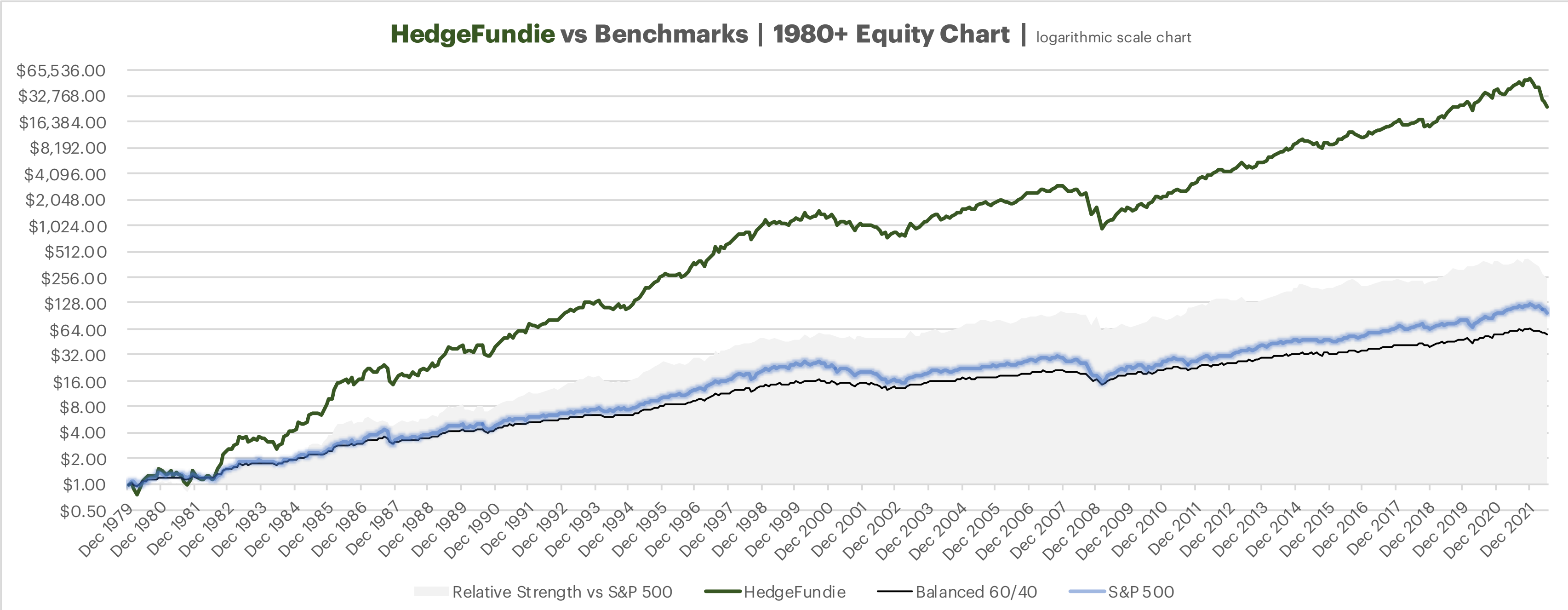
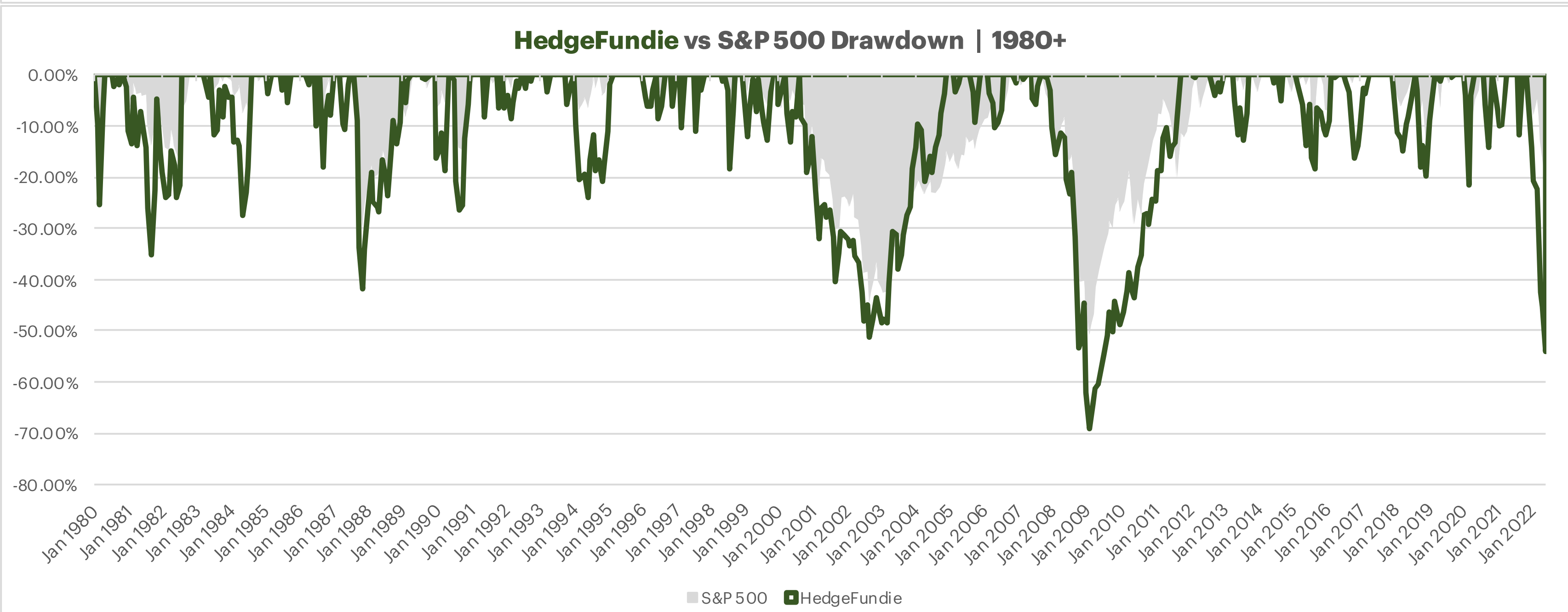
HedgeFundie's Excellent Adventure: 55% UPRO / 45% TMF





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

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Dual Momentum Strategies: MAX PAIN

USA Momentum Rotational always using triple leverage

Results through 06/30/2022

Investment selection for July 2022:
EDV, Extended Duration Treasuries

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.

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.

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

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%

Metric	2000+	1980+
Beta	1.04	1.60
Alpha	30.69%	17.75%

Annualized Returns, actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	-49.62%	-32.22%	37.95%	27.89%	33.11%	37.17%	35.89%
Balanced 60/40	-16.36%	-10.53%	6.13%	7.26%	8.42%	5.67%	9.83%
S&P 500	-20.25%	-10.90%	10.47%	11.16%	12.83%	6.21%	11.41%

Maximum Drawdown, single largest drawdown.

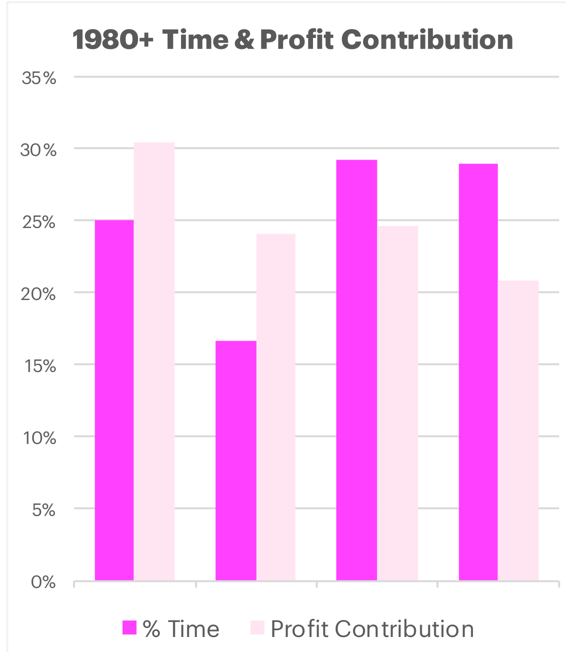
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	-49.62%	-49.62%	-49.62%	-49.62%	-49.62%	-49.62%	-67.06%
Balanced 60/40	-16.36%	-16.36%	-16.36%	-16.36%	-16.36%	-32.33%	-32.33%
S&P 500	-20.25%	-20.25%	-20.25%	-20.25%	-20.25%	-50.79%	-50.79%

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	34.14	25.36	16.31	15.67	13.80	12.83	19.81
Balanced 60/40	9.29	6.87	4.69	3.97	2.94	7.67	5.98
S&P 500	11.06	8.22	6.35	5.67	4.28	16.70	12.89

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
MAX PAIN	(2.90)	(1.26)	0.83	0.49	0.63	1.79	1.58
Balanced 60/40	(2.91)	(2.17)	(1.29)	(1.33)	(1.51)	0.65	1.35
S&P 500	(2.66)	(1.70)	(0.63)	(0.65)	(0.72)	0.51	1.03



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

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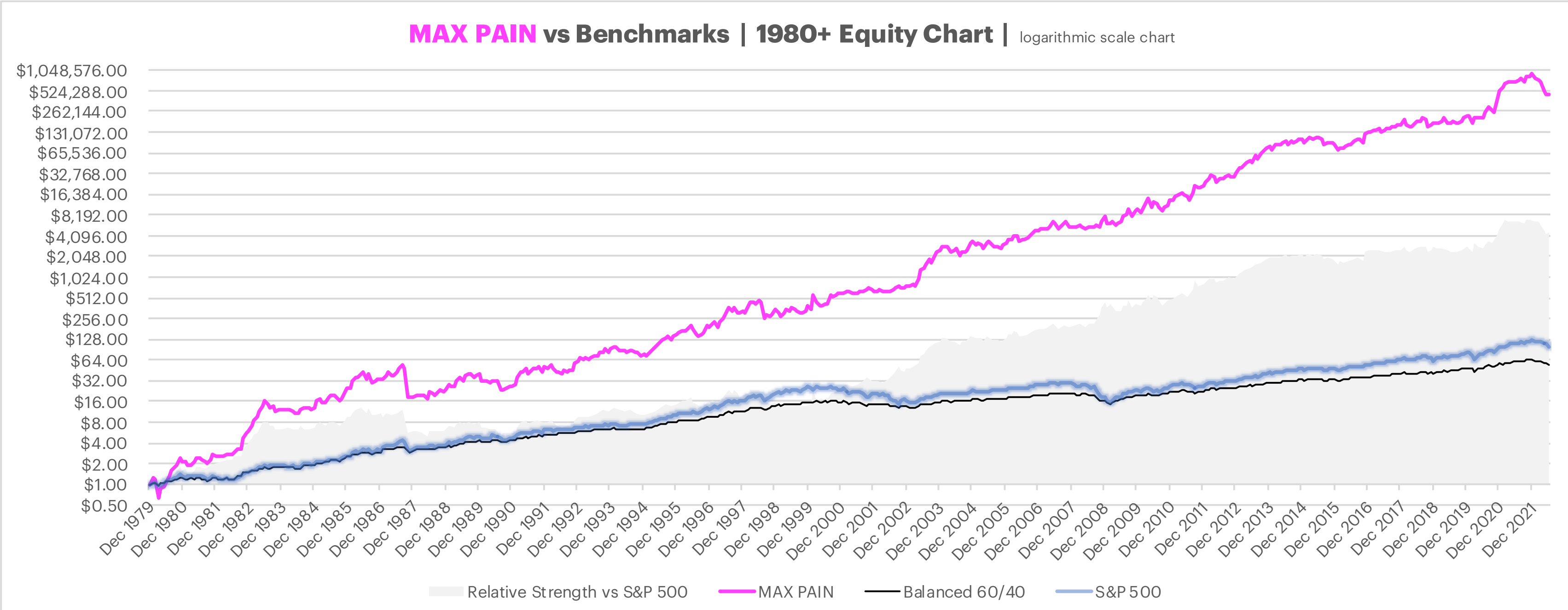
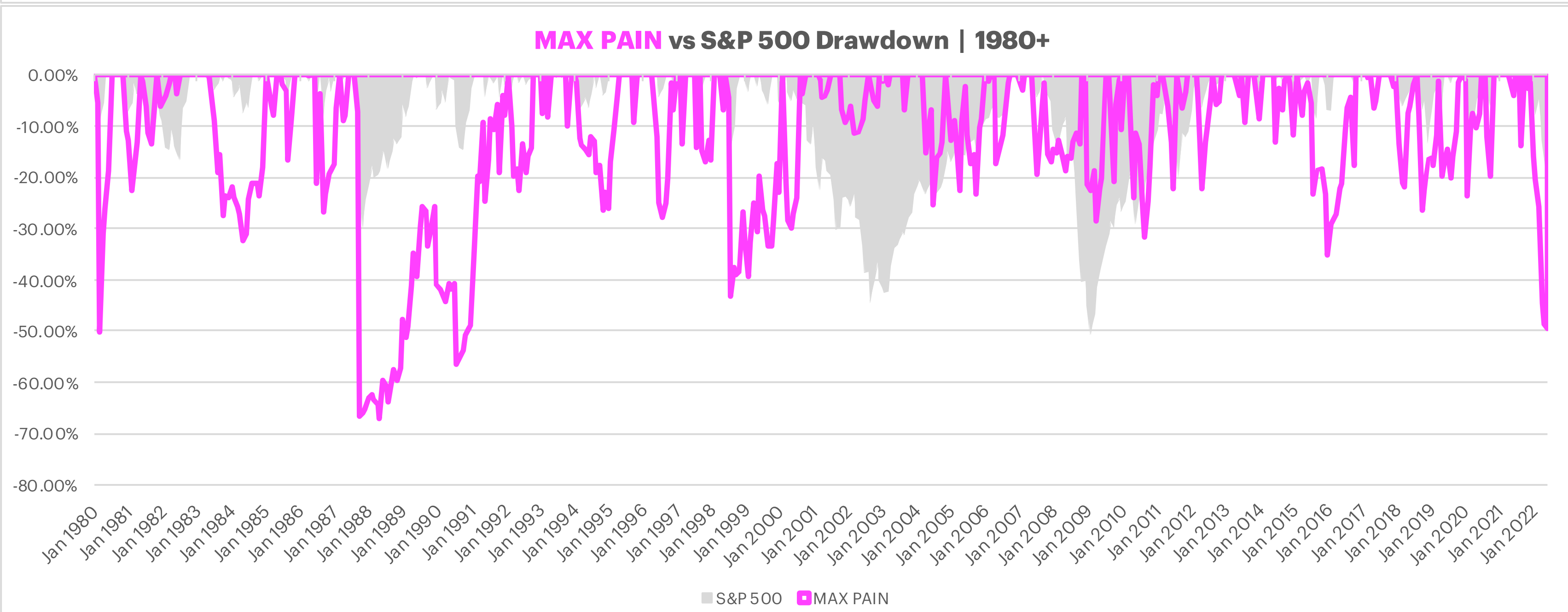
Dual Momentum Systems: MAX PAIN





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

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Dual Momentum Strategies: Profit Farmer

A Minimum Variance Adaptive Asset Allocation strategy by Private Farmer

Results through 06/30/2022

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	1.26	1.32
Alpha	27.75%	28.84%

Annualized Returns, actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	-60.34%	-49.14%	18.87%	19.17%	33.12%	35.51%	36.97%
MAX PAIN	-49.62%	-32.22%	37.95%	27.89%	33.11%	37.17%	30.70%
S&P 500	-20.25%	-10.90%	10.47%	11.16%	12.83%	6.21%	9.81%

Maximum Drawdown, single largest drawdown.

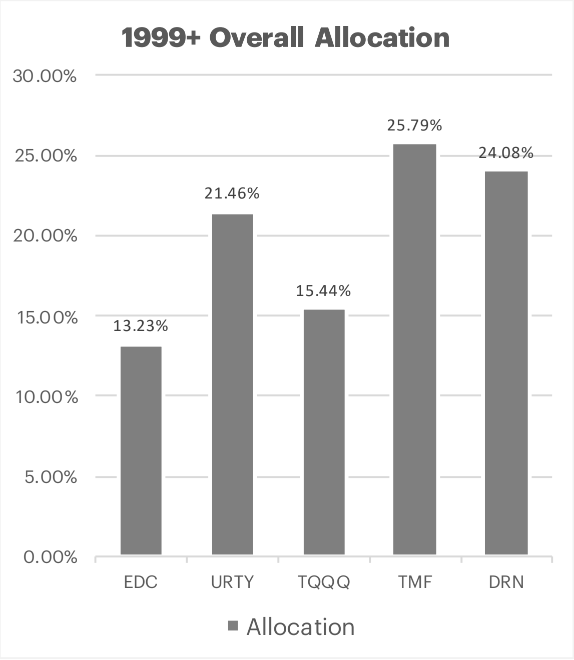
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	05/1987+
Profit Farmer	-60.34%	-60.34%	-60.34%	-60.34%	-60.34%	-60.34%	-60.34%
MAX PAIN	-49.62%	-49.62%	-49.62%	-49.62%	-49.62%	-49.62%	-67.06%
S&P 500	-20.25%	-20.25%	-20.25%	-20.25%	-20.25%	-50.79%	-50.79%

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	39.02	28.90	18.24	15.68	12.08	15.89	14.69
MAX PAIN	34.14	25.36	16.31	15.67	13.80	12.83	20.70
S&P 500	11.06	8.22	6.35	5.67	4.28	16.70	13.98

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	(3.41)	(1.82)	0.17	0.12	0.59	1.58	1.72
MAX PAIN	(2.90)	(1.26)	0.83	0.49	0.63	1.79	1.40
S&P 500	(2.66)	(1.70)	(0.63)	(0.65)	(0.72)	0.51	0.85



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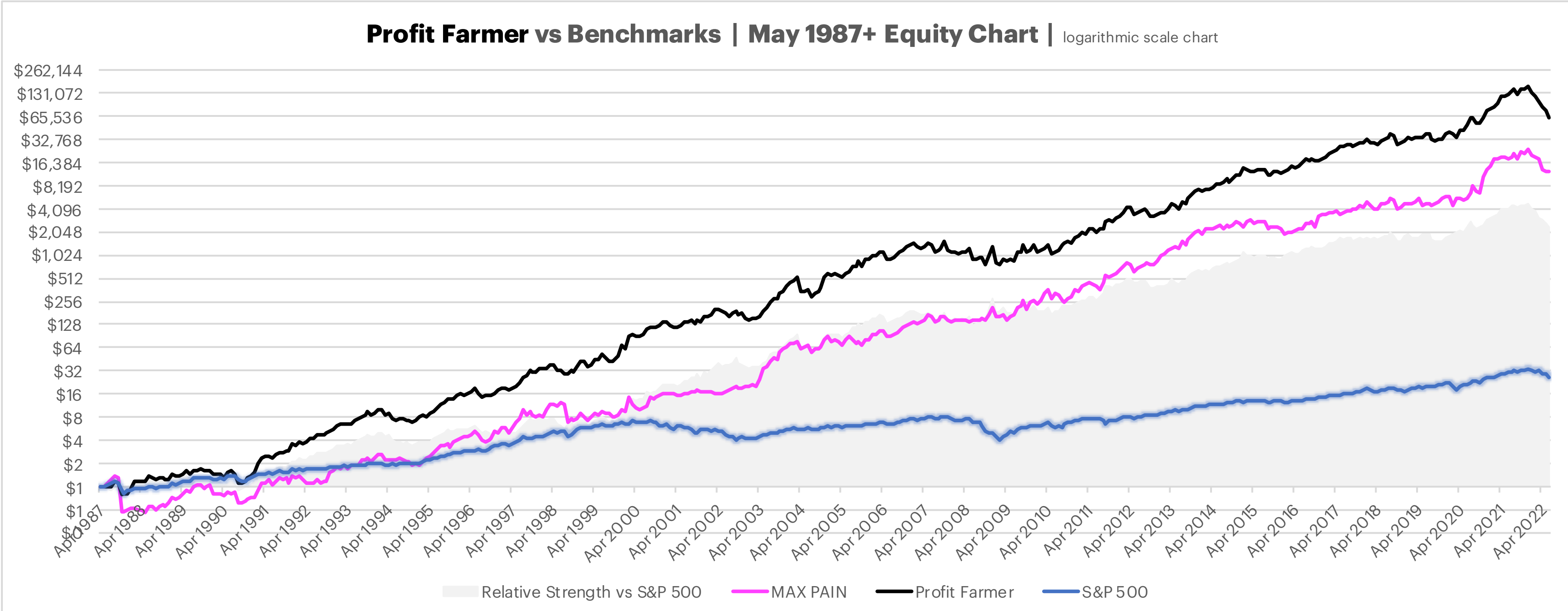
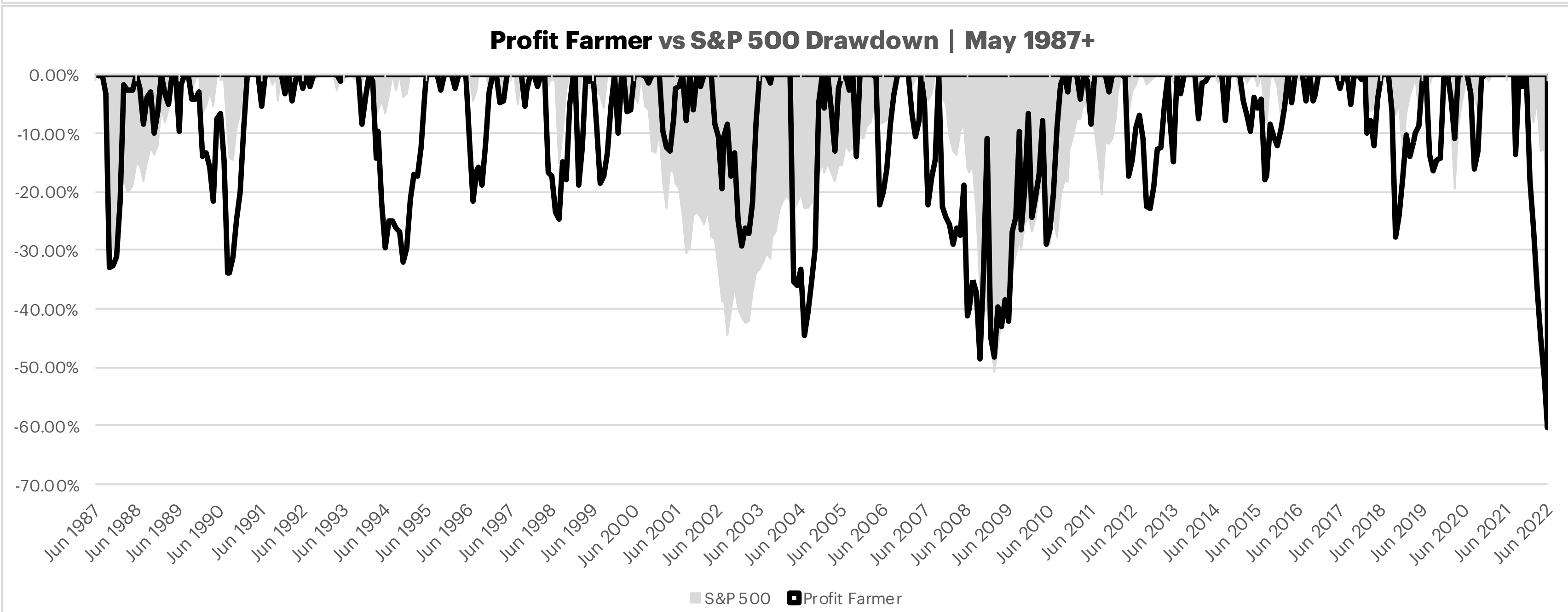
Strategy by Private Farmer





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