



# **DUAL MOMENTUM SYSTEMS**

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

**DUAL  
MOMENTUM  
SYSTEMS**

## **Model Portfolios**

## **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.

## **Fair Use**

The investment strategies and their investment selections presented within this report are free for your personal use, noting the disclosure above. These strategies are not allowed to be used by any CFA, CFP, RIA, CPA, CLU, CHFC, IAFP, NAPFA, PFS or any other investment professional - please inquire for licensing.

# Model Portfolios

1980 through February 28, 2025

Annual returns:

Year End	Benchmarks		Model Portfolios		
	US Market Russell 1000	Balanced 60/40	Conservative	Moderate	Aggressive
1980	31.87%	21.02%	17.43%	16.38%	35.73%
1981	-5.10%	0.07%	5.54%	4.87%	7.88%
1982	20.31%	25.68%	27.82%	41.47%	58.60%
1983	22.13%	16.21%	15.88%	27.54%	47.85%
1984	4.75%	9.84%	9.78%	8.69%	7.25%
1985	32.26%	27.65%	27.63%	30.76%	28.58%
1986	17.87%	17.65%	28.79%	38.04%	13.79%
1987	2.93%	4.81%	14.54%	13.00%	11.77%
1988	17.26%	12.64%	11.02%	6.52%	17.43%
1989	30.43%	24.20%	23.29%	29.67%	67.87%
1990	-4.21%	1.56%	0.37%	-1.79%	-1.90%
1991	33.04%	24.30%	16.31%	26.42%	34.86%
1992	8.93%	7.35%	8.02%	7.87%	7.29%
1993	10.18%	9.66%	13.00%	14.05%	10.30%
1994	0.39%	-0.77%	-1.09%	0.41%	-2.31%
1995	37.77%	29.81%	25.56%	28.81%	29.46%
1996	22.45%	14.70%	13.87%	12.43%	12.34%
1997	32.85%	23.58%	14.38%	19.76%	24.27%
1998	27.02%	21.01%	12.58%	14.75%	15.96%
1999	20.91%	11.65%	16.69%	21.08%	15.91%
2000	-6.15%	-1.49%	9.80%	8.81%	12.60%
2001	-12.15%	-3.81%	2.40%	2.24%	1.81%
2002	-22.31%	-9.80%	7.59%	8.16%	3.54%
2003	30.05%	18.19%	24.16%	46.82%	83.10%
2004	11.02%	8.00%	12.00%	16.66%	25.69%
2005	6.34%	3.87%	8.83%	7.01%	-1.11%
2006	15.41%	10.95%	14.45%	16.58%	12.25%
2007	5.32%	5.94%	12.19%	14.96%	8.04%
2008	-37.40%	-21.86%	0.56%	0.24%	2.03%
2009	28.33%	18.66%	20.36%	33.95%	62.02%
2010	16.08%	12.04%	17.13%	15.84%	22.65%
2011	1.23%	4.38%	13.68%	17.59%	34.26%
2012	16.51%	11.39%	7.09%	18.69%	29.17%
2013	32.78%	17.44%	11.88%	14.37%	21.24%
2014	13.07%	10.56%	8.59%	9.05%	12.81%
2015	0.79%	1.11%	-3.82%	-5.21%	-2.72%
2016	12.04%	8.34%	6.71%	7.56%	5.97%
2017	21.53%	14.26%	13.82%	15.55%	15.90%
2018	-4.89%	-2.47%	0.08%	0.81%	0.36%
2019	31.04%	21.98%	12.75%	12.56%	12.03%
2020	20.77%	14.93%	19.37%	32.19%	49.11%
2021	26.32%	15.74%	15.30%	20.30%	38.15%
2022	-19.19%	-15.86%	-4.44%	-9.96%	-15.65%
2023	26.42%	17.66%	8.24%	11.13%	15.81%
2024	24.34%	15.03%	17.75%	18.22%	19.42%
+/- R1000 YTD:	0.0%	-9.3%	-6.6%	-6.1%	-4.9%
CAGR	12.0%	10.0%	12.1%	14.8%	18.6%
+/- R1000 All:	0.0%	-1.9%	0.1%	2.8%	6.7%

## Model Portfolios

### Investments for the month of March 2025

#### Strategy Components Invested:

Month	Model Conservative Portfolio	33% GPMv 33% Bamboo+ Allocation 33% Triad - average leverage of 102%, maximum leverage of 113%
Mar 2024		9.26% QQQ 24.44% IWB 9.26% IWR 11.11% IWS 6.67% DBMF 21.48% SGOL 5.56% VGSH, 6.67% BND 5.56% VCSH
Apr 2024		11.11% QQQ 24.44% IWB 11.11% IWS 6.67% DBMF 23.33% SGOL 11.11% PDBC 6.67% BND 5.56% VCSH
May 2024		9.26% QQQ 24.44% IWB 11.11% IWS 6.67% DBMF 21.48% SGOL 9.26% PDBC 5.56% BIL, 5.56% VGSH, 6.67% BND
Jun 2024		11.11% QQQ 11.11% VXUS 24.44% IWB 6.67% DBMF 23.33% SGOL 11.11% PDBC 5.56% BIL, 6.67% BND
Jul 2024		11.11% QQQ 11.11% VXUS 24.44% IWB 6.67% DBMF 23.33% SGOL 11.11% PDBC 5.56% BIL, 6.67% BND
Aug 2024		11.11% QQQ 33.7% IWB 11.11% IWS 6.67% DBMF 23.33% SGOL 5.56% VGIT 6.67% BND
Sep 2024		11.11% QQQ 35.56% IWB 11.11% IWS 6.67% DBMF 23.33% SGOL 5.56% VGIT 6.67% BND
Oct 2024		11.11% QQQ 11.11% VXUS 35.56% IWB 6.67% DBMF 23.33% SGOL 5.56% VGIT 6.67% BND
Nov 2024		11.11% QQQ 35.56% IWB 11.11% IWS 6.67% DBMF 23.33% SGOL 6.67% BND 5.56% VCSH
Dec 2024		9.26% QQQ 33.7% IWB 11.11% IWS 6.67% DBMF 21.48% SGOL 5.56% VGSH, 6.67% BND 5.56% VCSH
Jan 2025		3.7% QQQ 28.15% IWB 6.67% DBMF 15.93% SGOL 16.67% BIL, 22.22% VGSH, 6.67% BND
Feb 2025		11.11% QQQ 24.44% IWB 11.11% IWS 6.67% DBMF 23.33% SGOL 11.11% PDBC 5.56% BIL, 6.67% BND
<b>Mar 2025</b>		<b>11.11% QQQ 11.11% VXUS 24.44% IWB 6.67% DBMF 23.33% SGOL 11.11% PDBC 6.67% BND 5.56% VCSH</b>

Month	Model Moderate Portfolio	20% GPMv 30% Bamboo++ Allocation 20% Triad+ 30% Global Navigator+ - ave leverage of 109%, max leverage of 161%
Mar 2024		5.56% QQQ 48.67% IWB 5.56% IWR 6.67% IWS 6% DBMF 14.89% SGOL 3.33% VGSH, 6% BND 3.33% VCSH
Apr 2024		6.67% QQQ 48.67% IWB 6.67% IWS 6% DBMF 16% SGOL 6.67% PDBC 6% BND 3.33% VCSH
May 2024		5.56% QQQ 48.67% IWB 6.67% IWS 6% DBMF 14.89% SGOL 5.56% PDBC 3.33% BIL, 3.33% VGSH, 6% BND
Jun 2024		6.67% QQQ 6.67% VXUS 48.67% IWB 6% DBMF 16% SGOL 6.67% PDBC 3.33% BIL, 6% BND
Jul 2024		6.67% QQQ 6.67% VXUS 48.67% IWB 6% DBMF 16% SGOL 6.67% PDBC 3.33% BIL, 6% BND
Aug 2024		6.67% QQQ 55.33% IWB 6.67% IWS 6% DBMF 16% SGOL 3.33% VGIT 6% BND
Sep 2024		6.67% QQQ 55.33% IWB 6.67% IWS 6% DBMF 16% SGOL 3.33% VGIT 6% BND
Oct 2024		6.67% QQQ 36.67% VXUS 25.33% IWB 6% DBMF 16% SGOL 3.33% VGIT 6% BND
Nov 2024		6.67% QQQ 55.33% IWB 6.67% IWS 6% DBMF 16% SGOL 6% BND 3.33% VCSH
Dec 2024		5.56% QQQ 54.22% IWB 6.67% IWS 6% DBMF 14.89% SGOL 3.33% VGSH, 6% BND 3.33% VCSH
Jan 2025		2.22% QQQ 50.89% IWB 6% DBMF 11.56% SGOL 10% BIL, 13.33% VGSH, 6% BND
Feb 2025		6.67% QQQ 48.67% IWB 6.67% IWS 6% DBMF 16% SGOL 6.67% PDBC 3.33% BIL, 6% BND
<b>Mar 2025</b>		<b>6.67% QQQ 6.67% VXUS 48.67% IWB 6% DBMF 16% SGOL 6.67% PDBC 6% BND 3.33% VCSH</b>

Month	Model Aggressive Portfolio	20% Bamboo Allocation 60% LT Gain++ 20% DBMF - ave leverage of 127%, max leverage of 220%
Mar 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Apr 2024		68% IWB 24% DBMF 4% SGOL 4% BND
May 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Jun 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Jul 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Aug 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Sep 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Oct 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Nov 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Dec 2024		68% IWB 24% DBMF 4% SGOL 4% BND
Jan 2025		68% IWB 24% DBMF 4% SGOL 4% BND
Feb 2025		68% IWB 24% DBMF 4% SGOL 4% BND
<b>Mar 2025</b>		68% IWB 24% DBMF 4% SGOL 4% BND

## Investment Strategies

### Rolling 24 Month Returns Through February 28, 2025

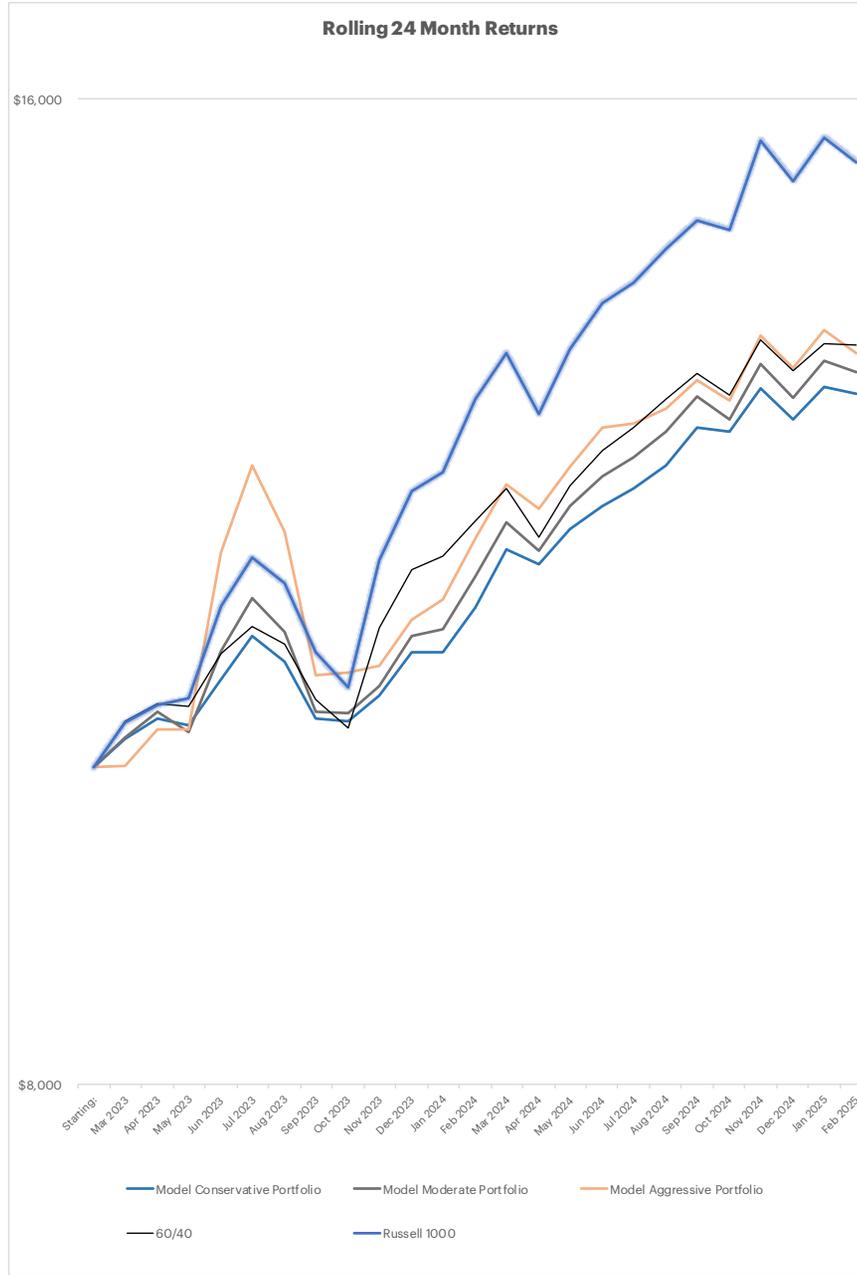
#### Returns and Maximum Drawdown:

Month	US Market		← Conservative      Aggressive →		
	Russell 1000	Balanced 60/40	Conservative	Moderate	Aggressive
Mar 2023	3.17%	3.30%	1.98%	2.12%	0.06%
Apr 2023	1.23%	1.20%	1.49%	1.85%	2.64%
May 2023	0.47%	-0.19%	-0.53%	-1.48%	-0.04%
Jun 2023	6.70%	3.80%	3.30%	5.86%	13.30%
Jul 2023	3.46%	1.91%	3.08%	3.87%	6.25%
Aug 2023	-1.74%	-1.24%	-1.79%	-2.41%	-4.49%
Sep 2023	-4.79%	-3.84%	-3.87%	-5.49%	-9.63%
Oct 2023	-2.38%	-1.91%	-0.26%	-0.06%	0.16%
Nov 2023	9.33%	7.29%	1.84%	1.88%	0.55%
Dec 2023	5.00%	4.16%	3.13%	3.66%	3.23%
Jan 2024	1.34%	0.89%	-0.01%	0.47%	1.43%
Feb 2024	5.27%	2.59%	3.16%	3.75%	4.43%
Mar 2024	3.26%	2.30%	4.22%	3.93%	3.90%
Apr 2024	-4.18%	-3.38%	-1.08%	-1.98%	-1.75%
May 2024	4.67%	3.71%	2.50%	3.12%	2.97%
Jun 2024	3.26%	2.47%	1.66%	2.17%	2.80%
Jul 2024	1.47%	1.67%	1.26%	1.33%	0.36%
Aug 2024	2.37%	1.98%	1.64%	1.80%	1.03%
Sep 2024	2.07%	1.78%	2.69%	2.47%	1.97%
Oct 2024	-0.68%	-1.52%	-0.31%	-1.61%	-1.34%
Nov 2024	6.50%	4.00%	3.13%	4.06%	4.67%
Dec 2024	-2.82%	-2.12%	-2.21%	-2.37%	-2.28%
Jan 2025	3.10%	1.85%	2.33%	2.62%	2.69%
Feb 2025	-1.74%	-0.03%	-0.44%	-0.83%	-1.58%
<b>24 Mo Rtrn:</b>	<b>52.97%</b>	<b>34.59%</b>	<b>30.07%</b>	<b>31.97%</b>	<b>33.83%</b>
<b>Max DD:</b>	<b>-4.18%</b>	<b>-3.38%</b>	<b>-2.21%</b>	<b>-2.37%</b>	<b>-2.28%</b>

b/(w) R1000:      0.0%      -18.4%      -22.9%      -21.0%      -19.1%

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

Month	US Market		← Conservative      Aggressive →		
	Russell 1000	Balanced 60/40	Conservative	Moderate	Aggressive
<b>Starting:</b>	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000
Mar 2023	\$ 10,317	\$ 10,330	\$ 10,198	\$ 10,212	\$ 10,006
Apr 2023	\$ 10,444	\$ 10,453	\$ 10,350	\$ 10,401	\$ 10,270
May 2023	\$ 10,493	\$ 10,434	\$ 10,295	\$ 10,246	\$ 10,266
Jun 2023	\$ 11,196	\$ 10,830	\$ 10,634	\$ 10,847	\$ 11,630
Jul 2023	\$ 11,583	\$ 11,037	\$ 10,962	\$ 11,267	\$ 12,357
Aug 2023	\$ 11,382	\$ 10,900	\$ 10,766	\$ 10,996	\$ 11,802
Sep 2023	\$ 10,837	\$ 10,482	\$ 10,350	\$ 10,392	\$ 10,666
Oct 2023	\$ 10,579	\$ 10,282	\$ 10,323	\$ 10,386	\$ 10,683
Nov 2023	\$ 11,566	\$ 11,032	\$ 10,513	\$ 10,581	\$ 10,742
Dec 2023	\$ 12,144	\$ 11,491	\$ 10,842	\$ 10,969	\$ 11,088
Jan 2024	\$ 12,307	\$ 11,593	\$ 10,842	\$ 11,020	\$ 11,247
Feb 2024	\$ 12,955	\$ 11,893	\$ 11,185	\$ 11,434	\$ 11,745
Mar 2024	\$ 13,378	\$ 12,167	\$ 11,657	\$ 11,884	\$ 12,203
Apr 2024	\$ 12,818	\$ 11,756	\$ 11,532	\$ 11,648	\$ 11,990
May 2024	\$ 13,417	\$ 12,192	\$ 11,820	\$ 12,012	\$ 12,346
Jun 2024	\$ 13,855	\$ 12,493	\$ 12,016	\$ 12,273	\$ 12,692
Jul 2024	\$ 14,058	\$ 12,701	\$ 12,168	\$ 12,436	\$ 12,738
Aug 2024	\$ 14,391	\$ 12,953	\$ 12,367	\$ 12,660	\$ 12,869
Sep 2024	\$ 14,689	\$ 13,185	\$ 12,699	\$ 12,973	\$ 13,122
Oct 2024	\$ 14,589	\$ 12,984	\$ 12,659	\$ 12,764	\$ 12,946
Nov 2024	\$ 15,538	\$ 13,504	\$ 13,055	\$ 13,281	\$ 13,551
Dec 2024	\$ 15,100	\$ 13,218	\$ 12,767	\$ 12,967	\$ 13,242
Jan 2025	\$ 15,568	\$ 13,463	\$ 13,065	\$ 13,307	\$ 13,598
Feb 2025	\$ 15,297	\$ 13,459	\$ 13,007	\$ 13,197	\$ 13,383



# Dual Momentum Strategies: Model Conservative Portfolio

Combination of Strategies

Results through 02/28/2025

## Investment selection for March 2021!

See NOMINAL INVESTMENT % on this page

## Tax friendliness:

Undetermined

## Months between change of holdings

Undetermined, look at the individual strategies for a better idea.

## Portfolio size appropriateness:

Undetermined, look at the individual strategies for a better idea.

## Characteristics:

Drawdowns: Far less than a Balanced 60/40 portfolio.

Volatility: Far less overall downside volatility over the long term.

Returns: Significantly higher returns than a 60/40.

## Strategy Description:

This Model Conservative Portfolio is based on the allocation: 33% GPMv 33% Bamboo+ Allocation 33% Triad It has an average leverage of 102% and a maximum leverage of 113%. The goal of this strategy is a balance of: 1) Near market returns 2) with a very low long term Ulcer Index and 3) low Max DD and 4) low average and modestly low maximum leverage. 5) ok to use a little leverage once in a while.

Metric	2000+	1980+
Model Conservative Beta	0.26	0.32
Model Conservative Alph	7.78%	8.00%
60/40 Beta	0.62	0.63
60/40 Alpha	1.59%	2.34%

## Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
<b>Model Conservative</b>	1.88%	16.29%	8.11%	11.31%	8.28%	10.03%	12.08%
Balanced 60/40	1.82%	13.16%	7.29%	9.77%	8.45%	6.43%	10.02%
Russell 1000	1.31%	18.07%	11.92%	16.36%	12.56%	7.81%	11.95%

## Maximum Drawdown single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
<b>Model Conservative</b>	-0.44%	-2.21%	-5.84%	-5.84%	-5.84%	-6.45%	-9.88%
Balanced 60/40	-0.03%	-3.38%	-15.85%	-15.85%	-20.09%	-32.33%	-32.33%
Russell 1000	-1.74%	-4.18%	-20.48%	-20.48%	-24.57%	-51.03%	-51.03%

## 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+
<b>Model Conservative</b>	0.25	0.70	2.22	2.27	2.39	1.95	1.96
Balanced 60/40	0.02	1.19	5.84	7.14	5.34	7.79	6.17
Russell 1000	1.00	1.49	7.61	8.48	6.77	16.21	12.83

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

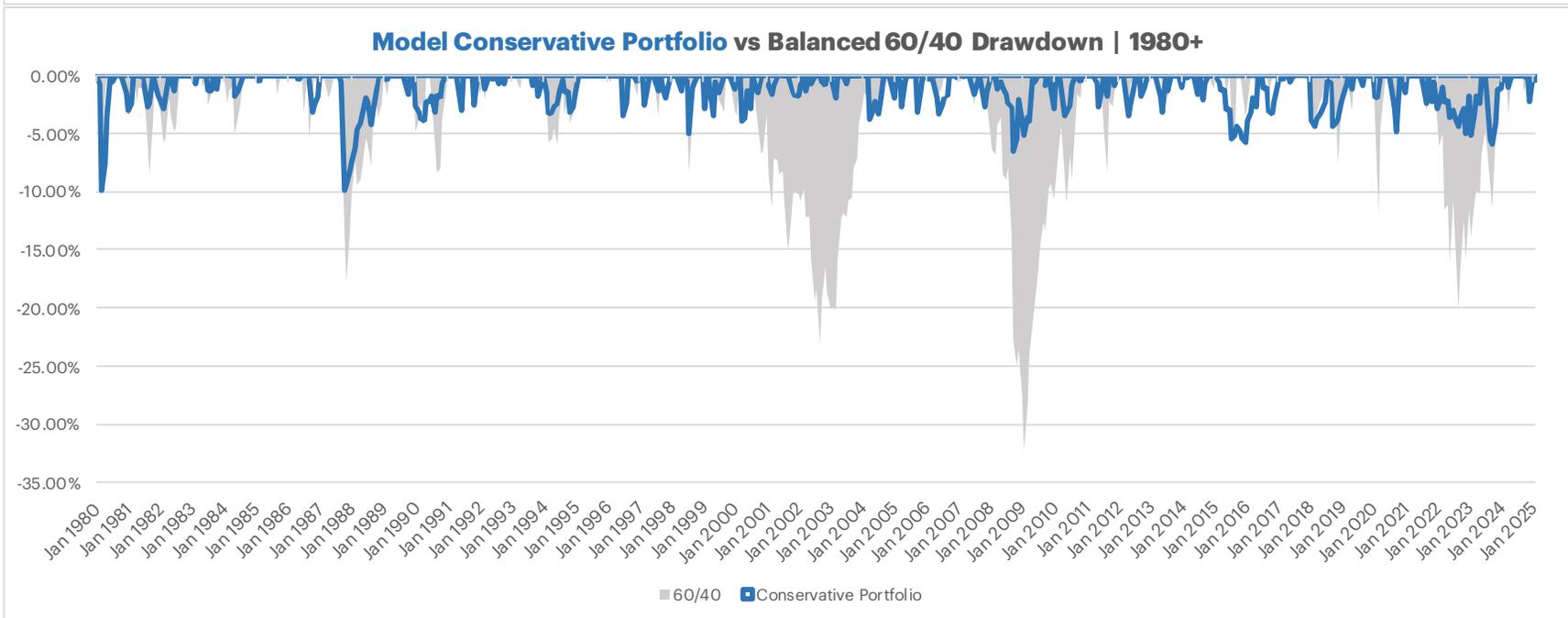
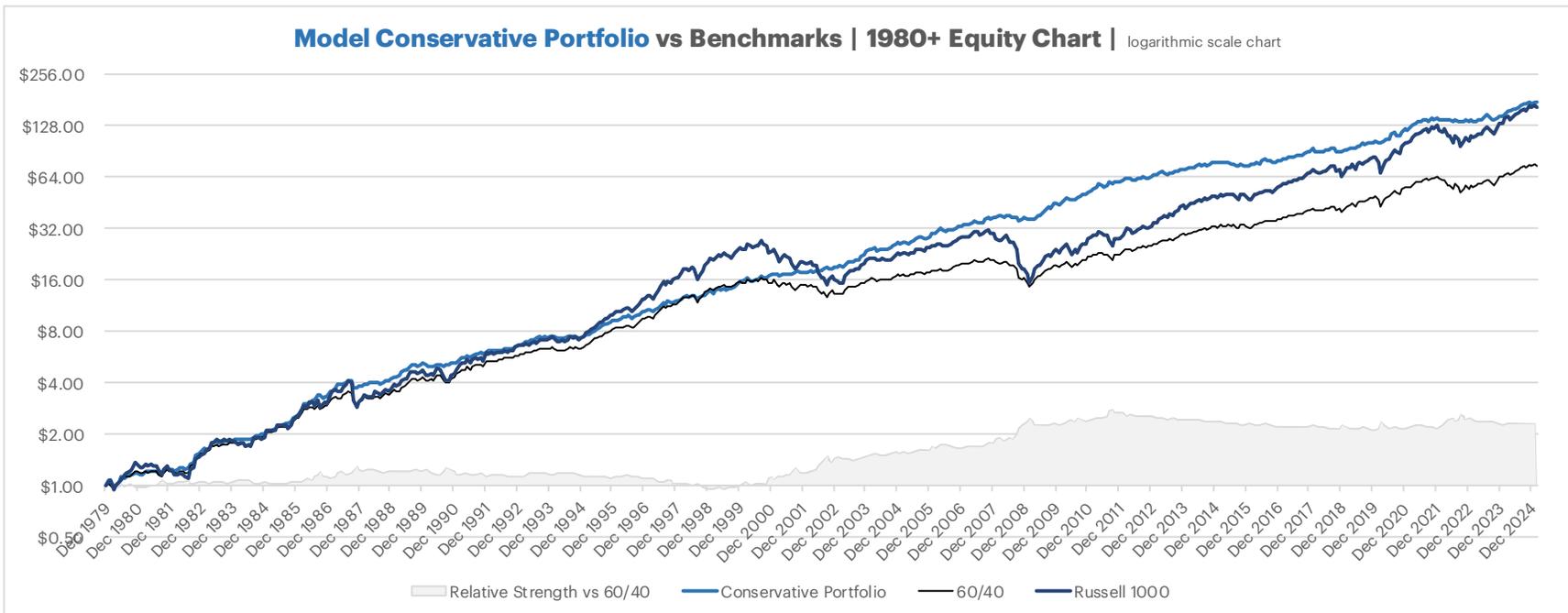
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
<b>Model Conservative</b>	3.65	3.59	0.84	1.51	0.94	1.40	1.79
Balanced 60/40	7.10	1.75	0.41	0.70	0.64	0.36	0.91
Russell 1000	0.77	2.18	0.75	1.09	0.86	0.41	0.80

## Nominal Investment % for March 2025:

ETF	Allocation
<b>QQQ</b>	<b>11.11%</b>
<b>VXUS</b>	<b>11.11%</b>
<b>IWB</b>	<b>24.44%</b>
IWR	0.00%
IWS	0.00%
<b>DBMF</b>	<b>6.67%</b>
<b>SGOL</b>	<b>23.33%</b>
<b>PDBC</b>	<b>11.11%</b>
VPL	0.00%
VGK	0.00%
IYR	0.00%
HYG	0.00%
LQD	0.00%
BIL	0.00%
VGSH	0.00%
VGIT	0.00%
TLT	0.00%
<b>BND</b>	<b>6.67%</b>
<b>VCSH</b>	<b>5.56%</b>
<b>TOTAL</b>	<b>100.00%</b>

This is a combination of strategies, annually rebalanced.

**Dual Momentum Systems: Model Conservative Portfolio**



This is a combination of strategies, annually rebalanced.

# Dual Momentum Strategies: Model Moderate Portfolio

Combination of Strategies

Results through 02/28/2025

## Investment selection for March 2021!

See NOMINAL INVESTMENT % on this page

## Tax friendliness:

Undetermined

## Months between change of holdings

Undetermined, look at the individual strategies for a better idea.

## Portfolio size appropriateness:

Undetermined, look at the individual strategies for a better idea.

## Characteristics:

Drawdowns: Noticeably lower Max DD compared to S&P 500.

Volatility: More volatile than a 60/40 recently, much less over the long term.

Returns: Similar returns to S&P 500 ovr the past 1 to 10 years, and superior returns over the long run.

## Strategy Description:

This Model Moderate Portfolio is based on the allocation: 20% GPMv 30% Bamboo++ Allocation 20% Triad+ 30% Global Navigator+ It has an average leverage of 109% and a maximum leverage of 161%. This strategy has an allocation for somebody who is willing to use modest leverage at times when the odds are in our favor, somebody who is looking for growth, but doesn't want S&P type maximum drawdowns and high volatility

## Annualized Returns, actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Model Moderate	1.77%	15.42%	7.51%	14.47%	9.63%	12.75%	14.77%
Balanced 60/40	1.82%	13.16%	7.29%	9.77%	8.45%	6.43%	10.02%
Russell 1000	1.31%	18.07%	11.92%	16.36%	12.56%	7.81%	11.95%

## Maximum Drawdown, single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Model Moderate	-0.83%	-2.37%	-7.82%	-7.82%	-9.96%	-9.96%	-11.48%
Balanced 60/40	-0.03%	-3.38%	-15.85%	-15.85%	-20.09%	-32.33%	-32.33%
Russell 1000	-1.74%	-4.18%	-20.48%	-20.48%	-24.57%	-51.03%	-51.03%

## 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+
Model Moderate	0.48	0.99	3.72	4.13	3.74	2.79	2.73
Balanced 60/40	0.02	1.19	5.84	7.14	5.34	7.79	6.17
Russell 1000	1.00	1.49	7.61	8.48	6.77	16.21	12.83

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Model Moderate	2.26	2.47	0.55	1.57	0.96	1.63	1.90
Balanced 60/40	7.10	1.75	0.41	0.70	0.64	0.36	0.91
Russell 1000	0.77	2.18	0.75	1.09	0.86	0.41	0.80

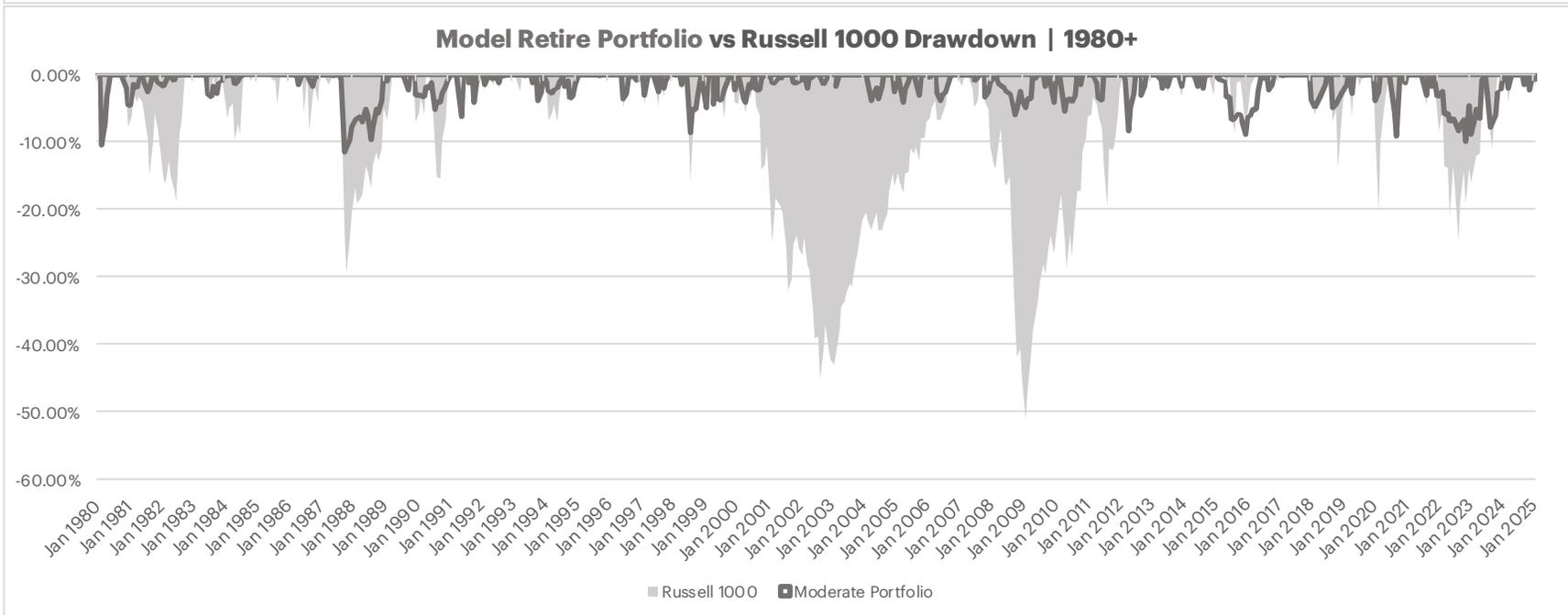
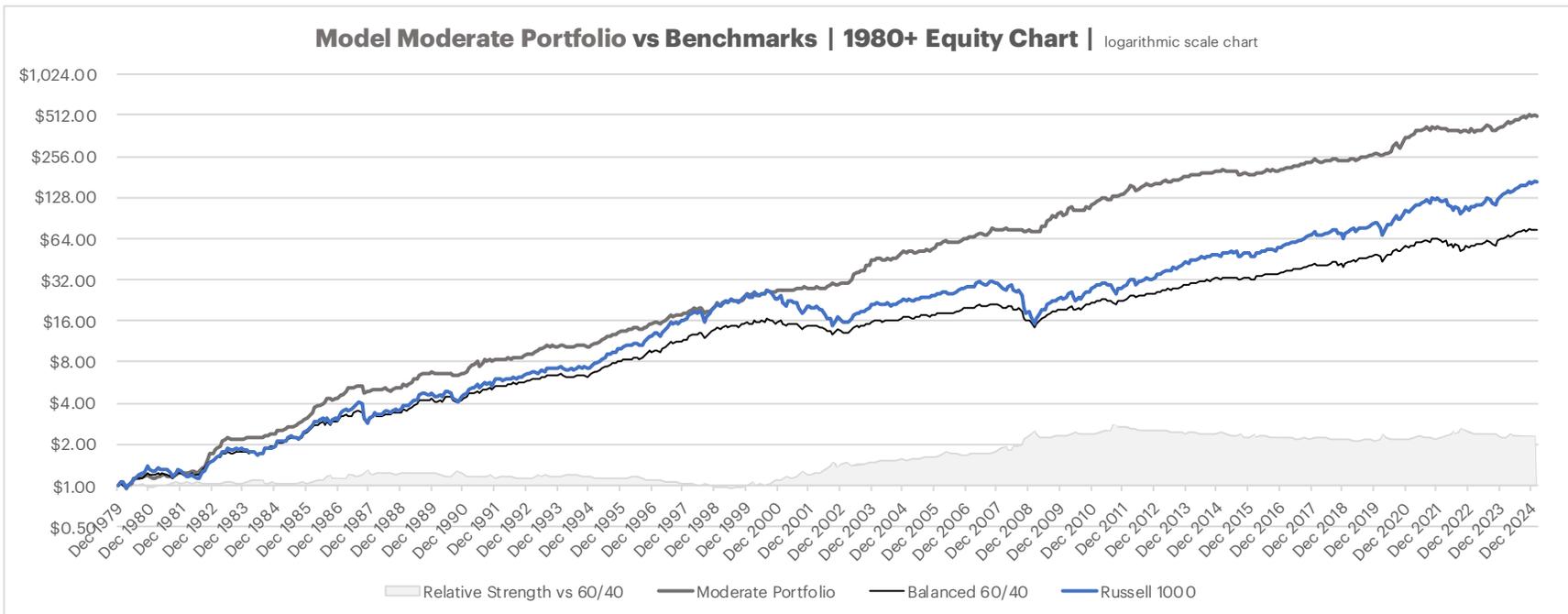
Metric	2000+	1980+
Model Moderate Beta	0.36	0.43
Model Moderate Alpha	9.78%	9.41%
60/40 Beta	0.62	0.63
60/40 Alpha	1.59%	2.34%

## Nominal Investment % for March 2025:

ETF	Allocation
QQQ	6.67%
VXUS	6.67%
IWB	48.67%
IWR	0.00%
IWS	0.00%
SSO	0.00%
DBMF	6.00%
SGOL	16.00%
PDBC	6.67%
VPL	0.00%
VGK	0.00%
IYR	0.00%
HYG	0.00%
LQD	0.00%
BIL	0.00%
VGSH	0.00%
VGIT	0.00%
TLT	0.00%
BND	6.00%
VCSH	3.33%
<b>TOTAL</b>	<b>100.00%</b>

This is a combination of strategies, annually rebalanced.

**Dual Momentum Systems: Model Moderate Portfolio**



This is a combination of strategies, annually rebalanced.

# Dual Momentum Strategies: Model Aggressive Portfolio

Combination of Strategies

Results through 02/28/2025

## Investment selection for March 2021!

See NOMINAL INVESTMENT % on this page

## Tax friendliness:

Undetermined

## Months between change of holdings

Undetermined, look at the individual strategies for a better idea.

## Portfolio size appropriateness:

Undetermined, look at the individual strategies for a better idea.

## Characteristics:

Drawdowns: Far less Max DD than the S&P 500.

Volatility: Slightly higher downside volatility than the S&P over the past 10 years, far lower over the long run.

Returns: Similar returns to the S&P over the past 10 years, significantly higher over the long run.

## Strategy Description:

This Model Aggressive Portfolio is based on the allocation: 20% Bamboo Allocation 60% LT Gain++ 20% DBMF [the Managed Futures ETF]. It has an average leverage of 127% and a maximum leverage of 220%. This strategy is for a person who is very comfortable with S&P type volatility, in exchange for the risk of a high maximum leverage you will be rewarded with terrific long term growth.

Metric	2000+	1980+
Model Aggressive Beta	0.47	0.58
Model Aggressive Alpha	13.20%	11.56%
Russell 1000 Beta	1.00	1.00
Russell 1000 Alpha	0.00%	0.00%

## Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Model Aggressive	1.07%	13.95%	6.85%	20.75%	12.22%	16.95%	18.62%
Balanced 60/40	1.82%	13.16%	7.29%	9.77%	8.45%	6.43%	10.02%
Russell 1000	1.31%	18.07%	11.92%	16.36%	12.56%	7.81%	11.95%

## Maximum Drawdown single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Model Aggressive	-1.58%	-2.28%	-13.74%	-13.74%	-15.65%	-15.65%	-15.65%
Balanced 60/40	-0.03%	-3.38%	-15.85%	-15.85%	-20.09%	-32.33%	-32.33%
Russell 1000	-1.74%	-4.18%	-20.48%	-20.48%	-24.57%	-51.03%	-51.03%

## 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+
Model Aggressive	0.91	0.98	6.15	5.92	4.78	3.99	3.61
Balanced 60/40	0.02	1.19	5.84	7.14	5.34	7.79	6.17
Russell 1000	1.00	1.49	7.61	8.48	6.77	16.21	12.83

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

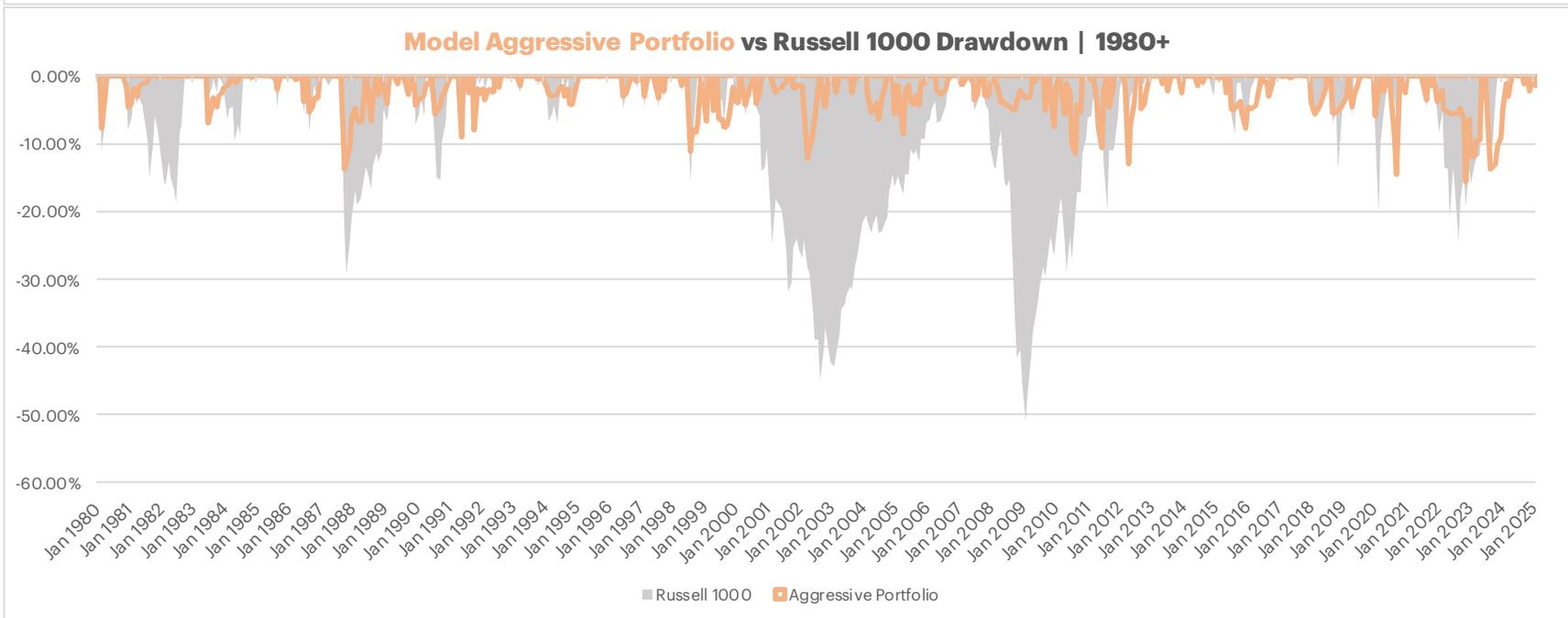
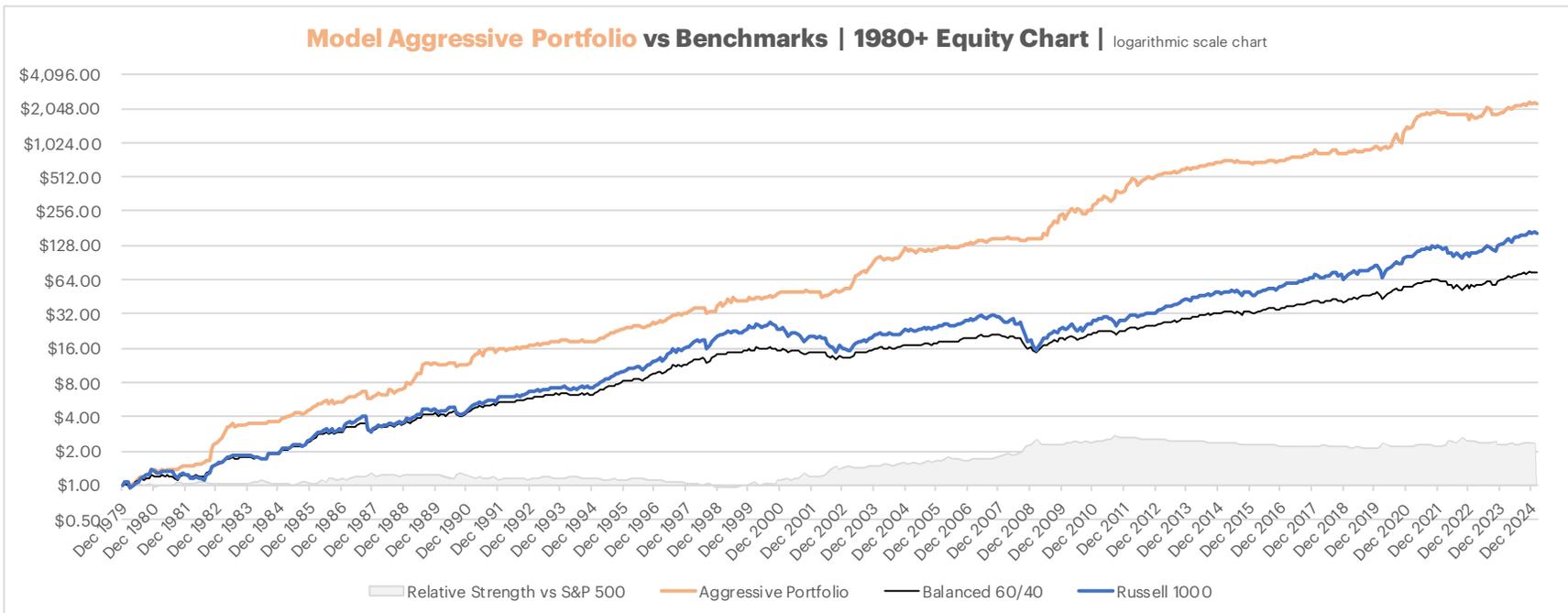
Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Model Aggressive	0.51	2.18	0.36	1.70	1.05	1.64	1.88
Balanced 60/40	7.10	1.75	0.41	0.70	0.64	0.36	0.91
Russell 1000	0.77	2.18	0.75	1.09	0.86	0.41	0.80

## Nominal Investment % for March 2025:

ETF	Allocation
IWB	68.00%
UPRO	0.00%
DBMF	24.00%
SGOL	4.00%
VGSH	0.00%
EDV	0.00%
BND	4.00%
<b>TOTAL</b>	<b>100.00%</b>

This is a combination of strategies, annually rebalanced.

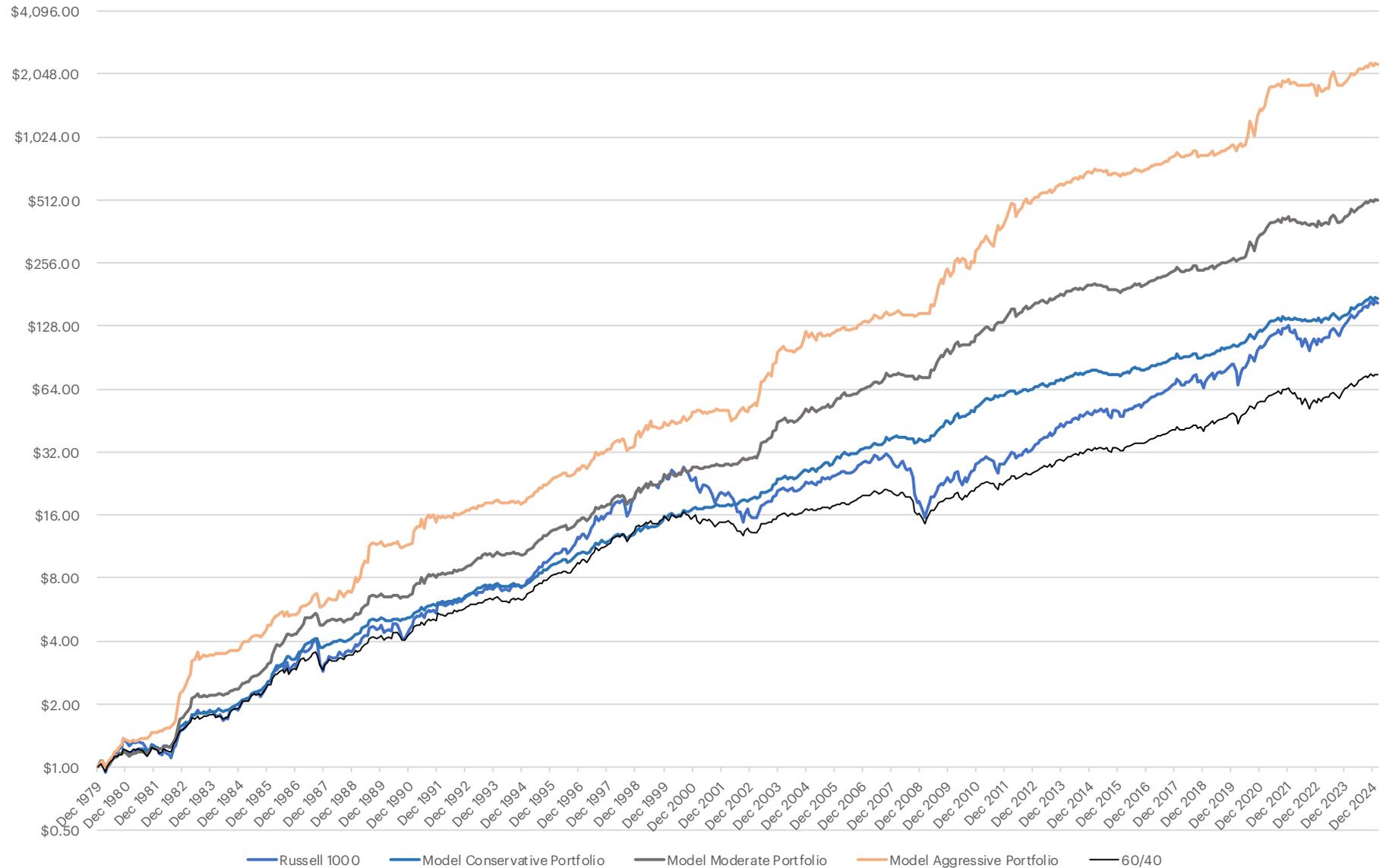
Dual Momentum Systems: **Model Aggressive Portfolio**



This is a combination of strategies, annually rebalanced.

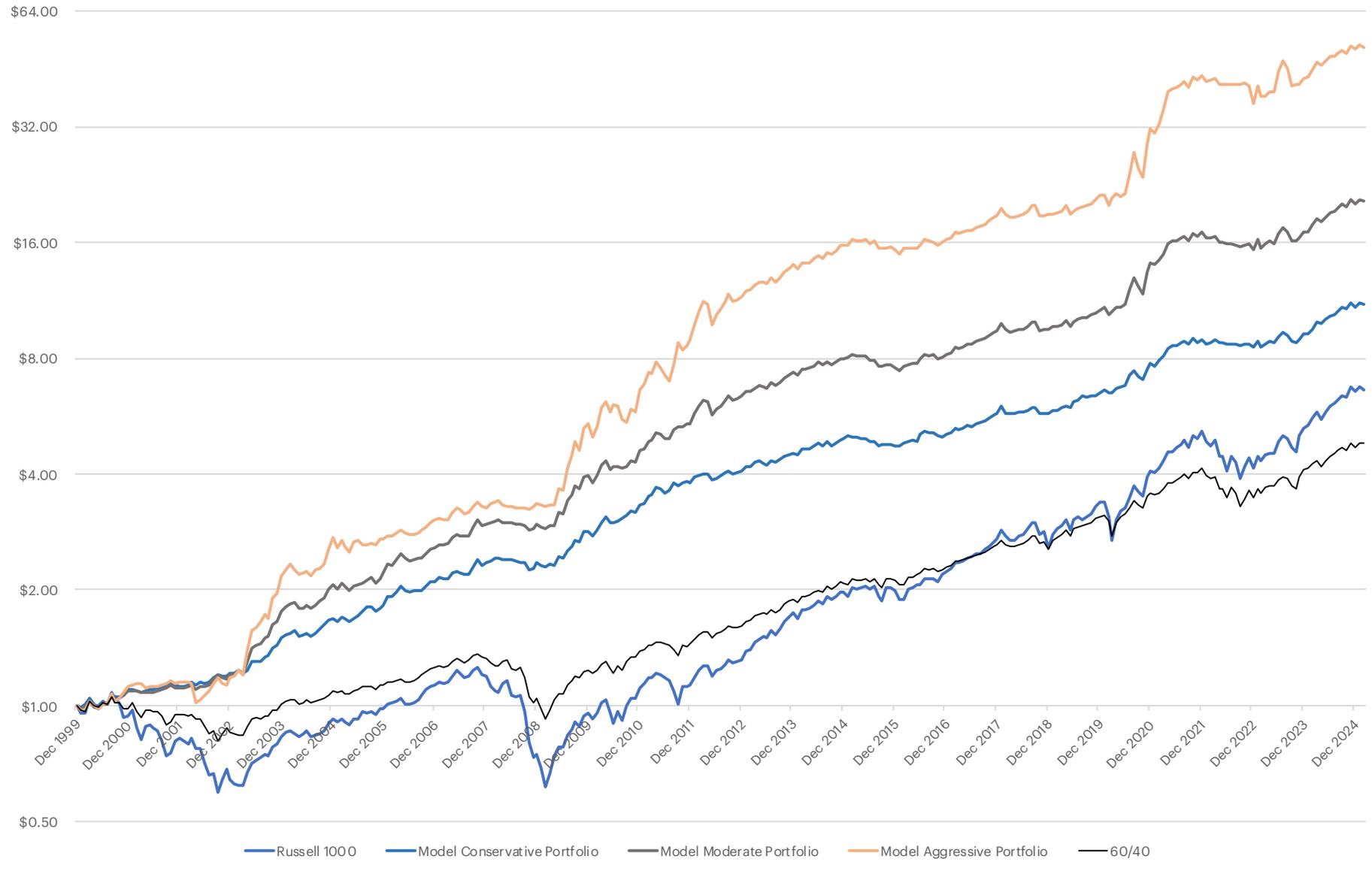
### Model Portfolios vs Benchmarks 1980+ Equity Chart

logarithmic scale chart



### Model Portfolios vs Benchmarks 2000+ Equity Chart

logarithmic scale chart

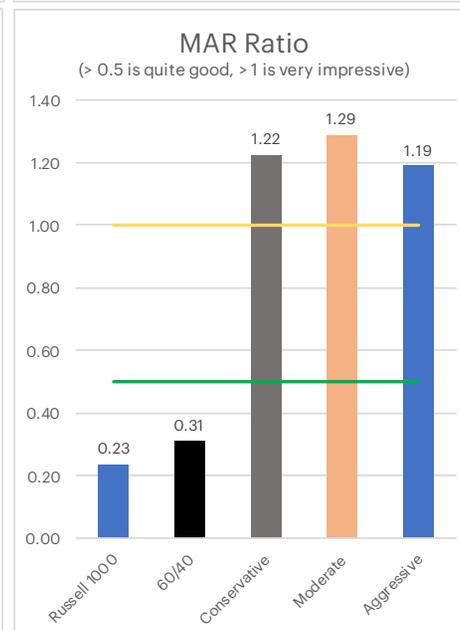
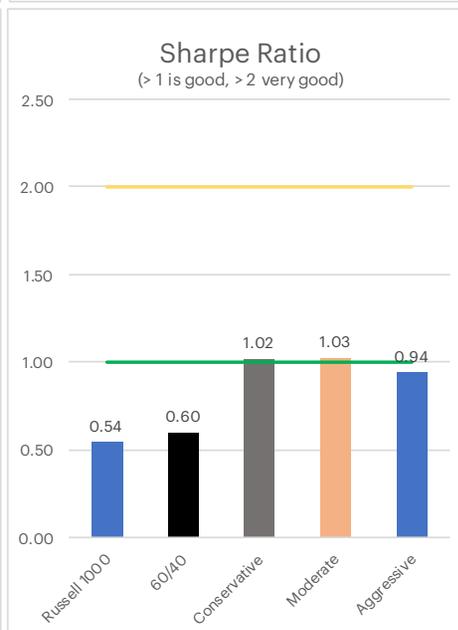
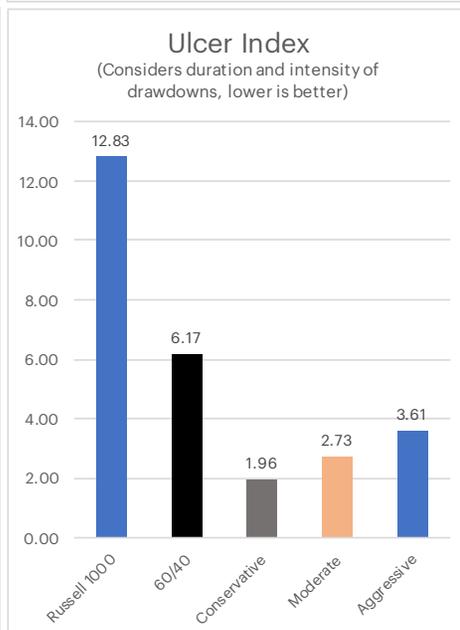
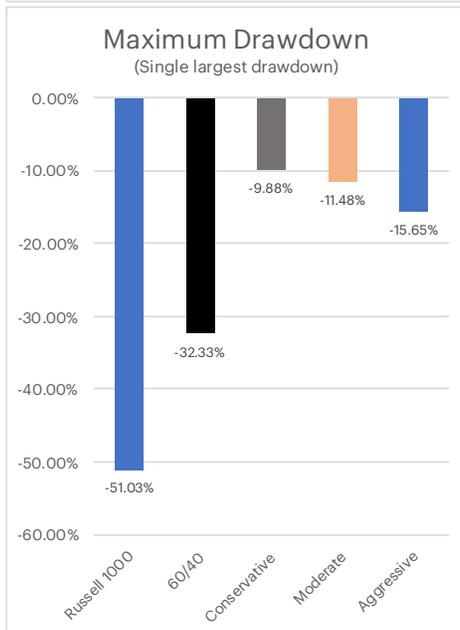
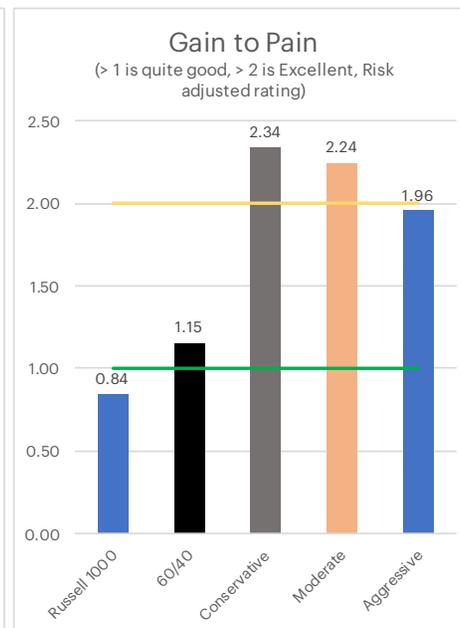
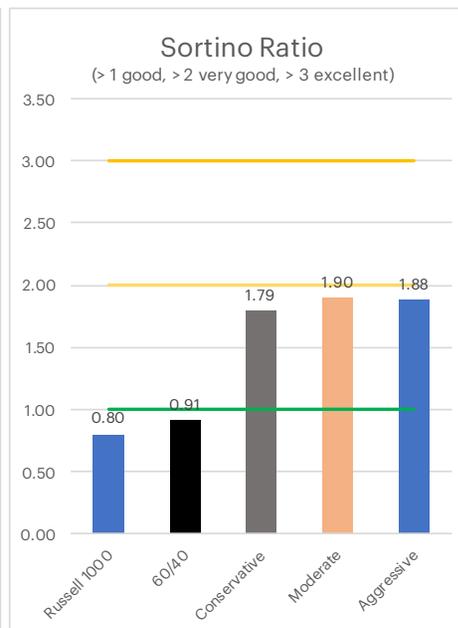
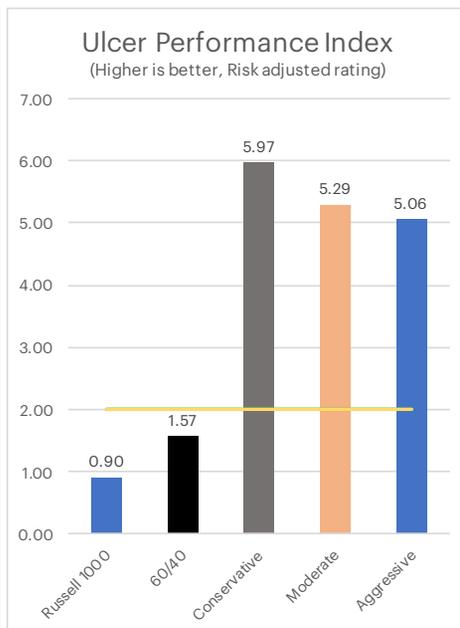
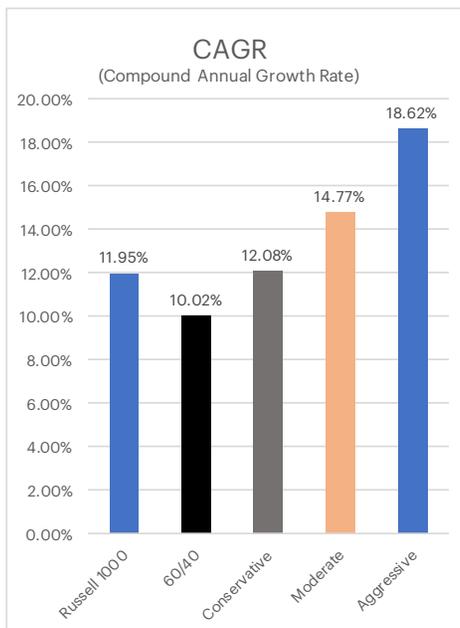


### Model Portfolios vs Benchmarks Rolling 10 Year Equity Chart

logarithmic scale chart

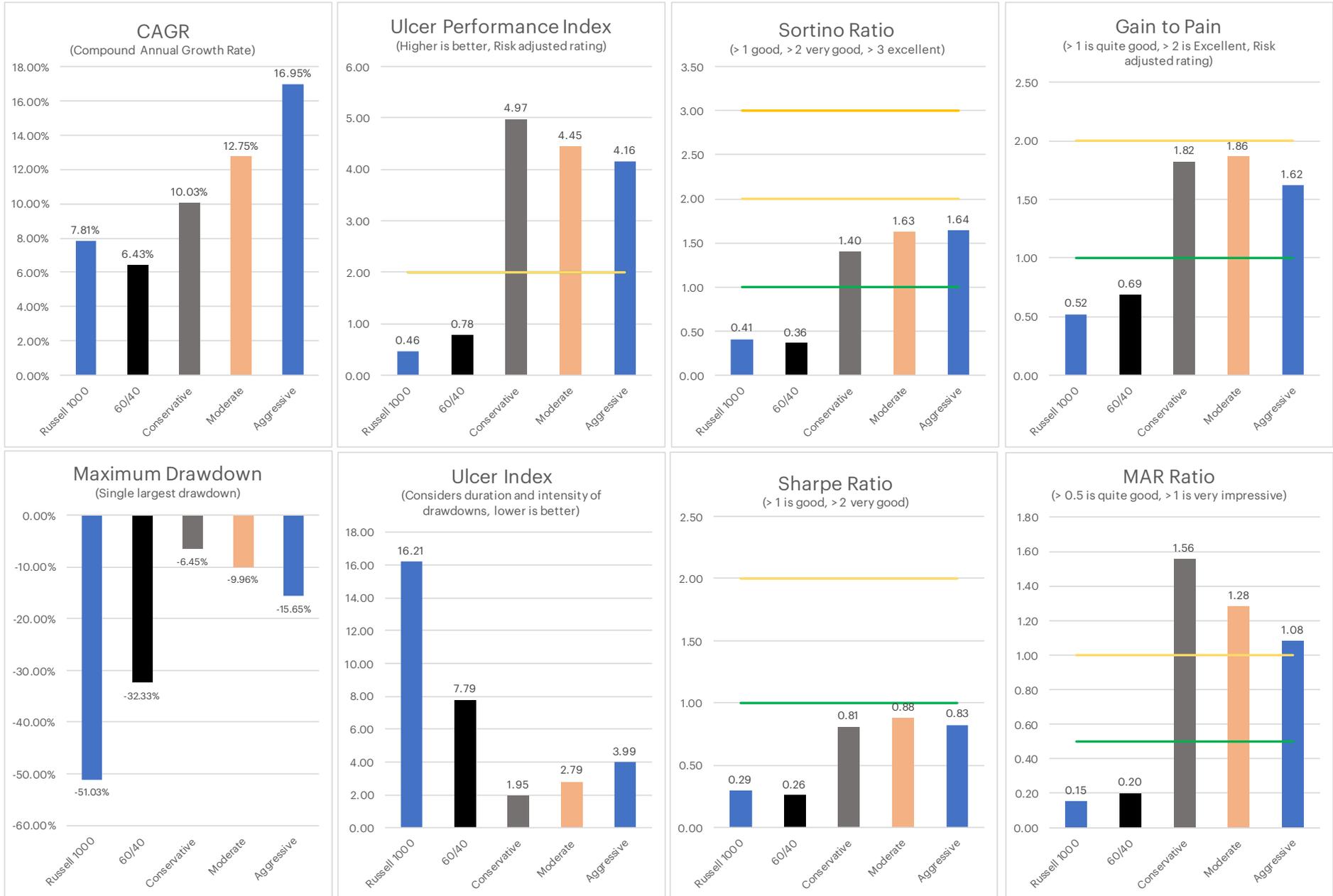


## "Long Term" Metrics Comparisons: Model Portfolios vs Russell 1000 & 60/40 1980 to current



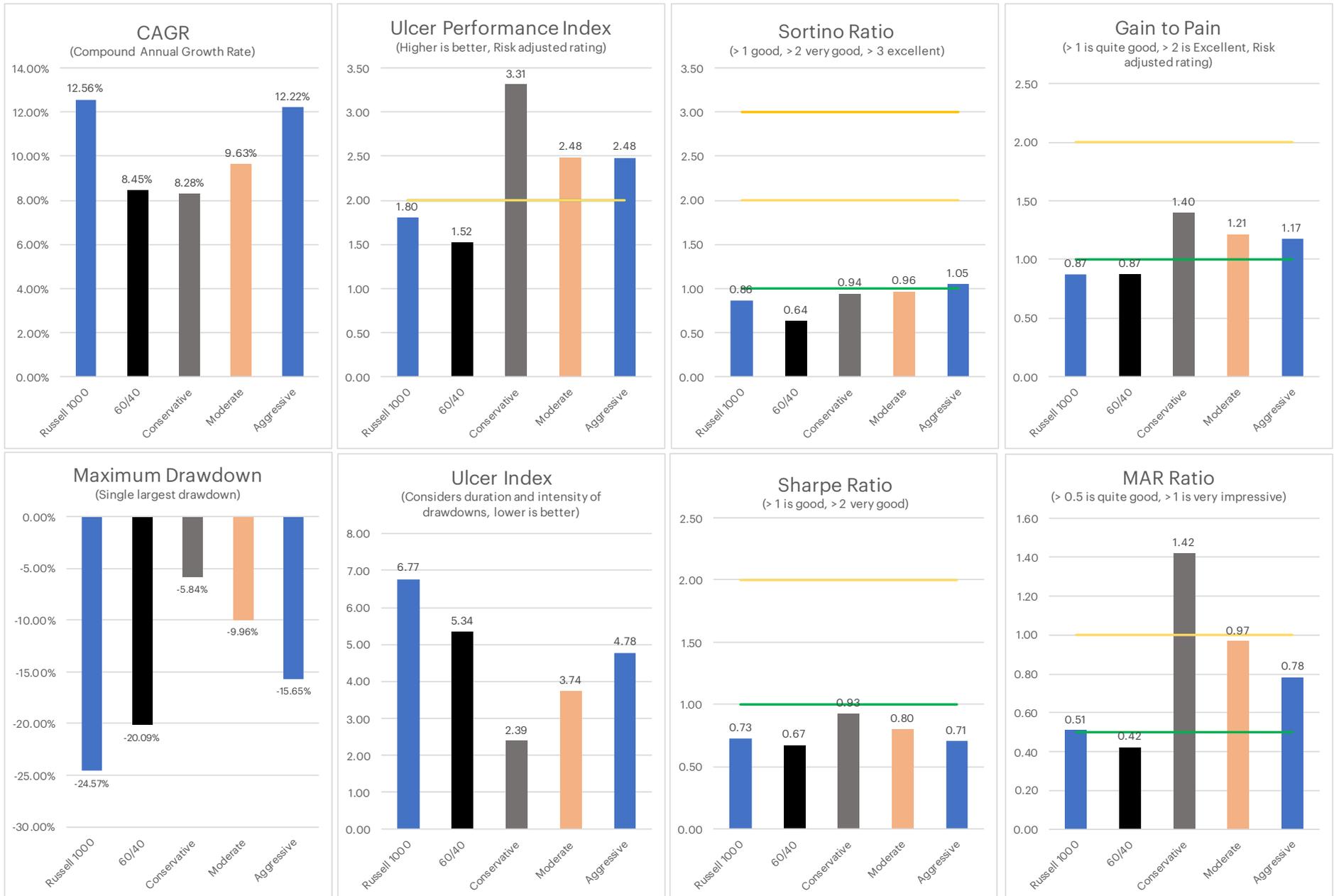
All Metrics are calculated from Monthly returns

## "Modern Era" Metrics Comparisons: Model Portfolios vs Russell 1000 & 60/40 2000 to current



All Metrics are calculated from Monthly returns

## Rolling 10 Years Metrics Comparisons: Model Portfolios vs Russell 1000 & 60/40



All Metrics are calculated from Monthly returns

## 36 Month Strategy Return Correlations

		←Conservative			Aggressive →
	IWB	Balanced 60/40	Conservative	Moderate	Aggressive
IWB	100%				
Balanced 60/40	98%	100%			
Conservative	74%	74%	100%		
Moderate	75%	75%	97%	100%	
Aggressive	59%	55%	100%	91%	100%

# DUAL MOMENTUM SYSTEMS

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](http://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.

A handwritten signature in black ink, appearing to read "Randy".