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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DMS Allocation Strategies

Dual Momentum Systems, aka DMS, was the brought about because I think it's a much better approach than buy and hold. It can lag the market in a hot market, althought it has great potential with reasonable risk to outperform when Smart Leverage kicks in. And where it really shines is keeping you out of protracted down markets. But dual momentum investment requires attention and possible changes of investment with each new month. There are people who would rather set it and forget it. There may also be people, like myself, who wish to set and forget certain accounts while still using dual momentum in other accounts.

The Bamboo Allocation allocation strategies are going to be inherently more volatile than the dual momentum strategies because they are always invested. The Bamboo+ Allocation and Bamboo++ Allocation strategies use 2X and 3X leverage with the US Large Cap allocation by using the same Smart Leverage as the dual momentum strategies.

These allocation strategies do not trade each month, they just require a re-balancing at the start of every year. The exception is if you are in the + or ++ version, there could be additional trades going into and out of Smart Leverage. But the leveraged versions have averaged less than 2 trades per year from 2000 forward, so it isn't excessive at all.

Investment Strategies Investments for the month of July 2024

Strategy Components Invested:

←Conservative Aggressive →

Month	Bamboo Allocation	Bamboo+ Allocation	Bamboo++ Allocation
Jul 2023	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	SSO: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	UPRO: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Aug 2023	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	SSO: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	UPRO: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Sep 2023	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	SSO: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	UPRO: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Oct 2023	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Nov 2023	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Dec 2023	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Jan 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Feb 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Mar 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Apr 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
May 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Jun 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%
Jul 2024	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%	IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%

For July, here are the investments by strategy:

Bamboo Allocation

This is an allocation strategy, rebalanced annually.

Bamboo+ Allocation

This is an allocation strategy, which rebalanced annually and will put the IWB portion into leveraged 2X SSO using Smart Leverage.

Bamboo++ Allocation

This is an allocation strategy, which rebalanced annually and will put the IWB portion into leveraged 3X UPRO using Smart Leverage.

^{**} When you rebalance, if you have gains, rebalance 1 year + 1 day so that you get long term capital gains if not in a taxed advantaged account.

DMS Bamboo Allocations

Rolling 24 Month Returns Through June 01, 2024

Returns and	l Maximum	Drawdown:
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Returns and Maximum Drawdown:			←Conservative		Aggressive →	
	US Market	Balanced				
Month	IWB	60/40	Golden Butterfly	Bamboo Allocation	Bamboo+ Allocation	Bamboo++ Allocation
Jul 2022	9.27%	6.48%	3.54%	2.06%	2.06%	2.06%
Aug 2022	-3.84%	-3.57%	-2.87%	-1.82%	-1.82%	-1.82%
Sep 2022	-9.17%	-7.22%	-6.06%	-3.05%	-3.05%	-3.05%
Oct 2022	7.90%	4.41%	2.40%	2.30%	2.30%	2.30%
Nov 2022	5.35%	4.80%	5.23%	1.62%	1.62%	1.62%
Dec 2022	-5.75%	-3.78%	-2.06%	-1.51%	-3.69%	-5.81%
Jan 2023	6.64%	5.10%	6.00%	3.83%	6.06%	8.42%
Feb 2023	-2.38%	-2.57%	-3.15%	-2.46%	-3.84%	-5.23%
Mar 2023	3.17%	3.30%	2.22%	1.98%	1.99%	2.00%
Apr 2023	1.23%	1.20%	0.35%	1.00%	1.57%	2.01%
May 2023	0.47%	-0.19%	-1.53%	-0.22%	-0.29%	-0.47%
Jun 2023	6.70%	3.80%	2.67%	2.91%	5.48%	8.37%
Jul 2023	3.46%	1.91%	1.87%	1.88%	3.13%	4.60%
Aug 2023	-1.74%	-1.24%	-1.88%	-1.08%	-2.18%	-3.43%
Sep 2023	-4.79%	-3.84%	-4.46%	-2.69%	-5.09%	-7.61%
Oct 2023	-2.38%	-1.91%	-1.01%	0.02%	-0.01%	-0.03%
Nov 2023	9.33%	7.29%	6.17%	4.31%	4.37%	4.43%
Dec 2023	5.00%	4.16%	5.18%	2.65%	2.68%	2.71%
Jan 2024	1.34%	0.89%	-0.97%	0.70%	0.70%	0.70%
Feb 2024	5.27%	2.59%	1.45%	2.67%	2.67%	2.67%
Mar 2024	3.26%	2.30%	3.76%	4.30%	4.30%	4.30%
Apr 2024	-4.18%	-3.38%	-2.79%	-0.64%	-0.64%	-0.64%
May 2024	4.67%	3.71%	2.88%	2.25%	2.25%	2.25%
Jun 2024	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
24 Mo Rtrn:	42.81%	25.22%	16.80%	22.63%	21.51%	20.29%
CAGR	19.50%	11.90%	8.07%	10.74%	10.23%	9.68%
Max DD:	-8.67%	-6.84%	-7.21%	-3.74%	-7.17%	-10.81%
b/(w) S&P 500:	0.0%	-17.6%	-26.0%	-20.2%	-21.3%	-22.5%

\$10,000 turns into:

Month

Jul 2022 Aug 2022

Sep 2022

Oct 2022

Nov 2022

Dec 2022

Jan 2023

Mar 2023

May 2023

Jul 2023

Aug 2023 Sep 2023

Oct 2023

Nov 2023

Dec 2023

Jan 2024

Feb 2024

Mar 2024

Apr 2024

May 2024

Jun 2024

Apr 2023

Jun 2023

Balanced 60/40

\$ 10,648 \$

\$ 9,527 \$

\$

\$ 10,268

\$ 9,947

\$ 10,425

\$ 10,031

\$ 11,337 \$

\$ 11,196

\$ 11,803

\$ 11,908

\$ 12,216

\$ 10,904 \$ 10,543 \$

\$ 10,982 \$ 10,610 \$

\$ 11,117 \$ 10,737 \$

\$ 11,169 \$ 10,717 \$

\$ 11,535 \$ 10,767 \$

\$ 12,311 \$ 11,331 \$

\$ 14,240 \$ 12,497 \$

\$ 14,281 \$ 12,522 \$

\$ 13,644 \$ 12,075 \$

\$ 14,281 \$ 12,522

\$ 11,917 \$ 11,124

\$ 11,260 \$ 10,561

Starting: \$ 10,000 \$ 10,000 \$

\$ 10,927

\$ 10,507

\$ 9,544

\$ 10,298

\$ 10,849

\$ 10,225

\$ 12,330

\$ 12,115

\$ 12,927

\$ 13,100

\$ 13,790

Feb 2023 \$ 10.644 \$ 10.271 \$

←Conservative

Aggressive \rightarrow 10,000 10,000 \$ 10,000 10,000 10,354 \$ 10,206 \$ 10,206 10,206 10,057 10,021 10,021 10,021 9,447 9,715 \$ 9,715 9,715 9.939 \$ 9,675 9,939 9.939 10.181 \$ 10.100 10,100 \$ 10.100 9,971 9,948 9,727 9,513 10,570 10,328 \$ 10,314 10,316 \$ 10.236 10.074 \$ 9.920 9.775 10,463 10,274 \$ 10,118 \$ 9,971 10,277 10,500 10,377 10,172 10,339 10.354 10.247 10.124 10,615 10,655 10,808 10,971 10,814 10,856 11,147 11,476 10,610 10,739 10,905 11,082 10,137 10,450 10,349 10,239 10,035 10,453 10,348 10,236 10,653 10,903 10,801 10,689 \$ \$ 11,205 11,192 11,090 10,978 11,096 11,270 11,168 11,055 11,257 11,571 11,466 11,351 11,680 \$ 12,069 \$ 11,960 \$ 11,839 11,354 11,993 \$ 11,884 11,764 11,680 12,263 \$ 12,151 \$ 12,029 11,680 12,263 12,151 12,029

	Rolling 24 Month Returns
\$16,000	
\$8,000	Victo 4145 24155 24155 14155 14155 2415 2415
	—— Bamboo Allocation —— Bamboo++ Allocation —— Golden Butterfly —— Golden Butterfly —— 60/40 —— IWB

DMS Allocation Investment Strategies 2000 through June 01, 2024

nual returr	13.			←Conservative Aggressive →				
		Benchm	arks		Allocation Strategic	es		
Year End	US Market IWB	Balanced 60/40	Golden Butterfly	Bamboo Allocation	Bamboo+ Allocation	Bamboo++ Allocati		
1980	31.87%	21.02%	15.32%	27.82%	27.82%	27.82		
1981	-5.10%	0.07%	-1.44%	-2.15%	-2.15%	-2.1		
1982	20.31%	25.68%	27.28%	20.12%	28.39%	37.8		
1983	22.13%	16.21%	12.26%	11.66%	20.09%	29.9		
1984	4.75%	9.84%	3.87%	2.70%	2.70%	2.7		
1985	32.26%	27.65%	24.78%	23.22%	23.22%	23.2		
1986	17.87%	17.65%	17.37%	14.97%	14.97%	14.9		
1987	2.93%	4.81%	5.17%	16.92%	16.92%	16.9		
1988	17.26%	12.64%	9.73%	9.33%	10.47%	11.6		
1989	30.43%	24.20%	15.06%	14.67%	28.22%	45.5		
1990	-4.21%	1.56%	-2.54%	3.30%	3.30%	3.3		
1991	33.04%	24.30%	19.73%	15.24%	20.75%	26.7		
1992	8.93%	7.35%	9.25%	3.69%	3.69%	3.6		
1993	10.18%	9.66%	14.57%	11.44%	11.44%	11.4		
1994	0.39%	-0.77%	-1.93%	-0.93%	-0.93%	-0.9		
1995	37.77%	29.81%	22.05%	21.45%	21.45%	21.4		
1996	22.45%	14.70%	8.36%	10.46%	10.46%	10.4		
1997	32.85%	23.58%	13.25%	12.75%	12.75%	12.7		
1998	27.02%	21.01%	7.91%	13.65%	16.55%	19.5		
1999	20.91%	11.65%	3.66%	8.16%	10.22%	12.1		
2000	-6.15%	-1.49%	7.27%	0.65%	0.65%	0.6		
2000	-12.15%	-3.81%	3.01%	-2.65%	-2.65%	-2.6		
2002	-22.31%	-9.80%	3.13%	0.64%	-1.32%	-3.1		
2002	30.05%	18.19%	18.45%	19.97%	34.90%	54.4		
2003	11.02%	8.00%	9.97%	6.40%	10.39%	14.6		
2005	6.34%	3.87%	8.09%	7.17%	6.54%	6.0		
2006	15.41%	10.95%	12.56%	12.73%	12.73%	12.7		
2007	5.32%	5.94%	9.55%	11.48%	11.48%	11.4		
2007	-37.40%	-21.86%	-4.89%	-10.40%	-10.40%	-10.4		
2008	28.33%	18.66%	12.71%	16.66%	29.25%	43.4		
2010	16.08%	12.04%	16.51%	15.40%	19.94%	25.3		
2010	1.23%	4.38%	8.31%	3.00%	3.71%	4.3		
2011	16.51%	11.39%	9.01%	8.24%	14.05%	20.3		
2012	32.78%	17.44%	5.64%	7.16%	7.16%	7.1		
2013	13.07%	10.56%	9.72%	9.16%	9.16%	9.1		
2014	0.79%	1.11%	-3.27%	-1.75%	-1.75%	-1.7		
2016	12.04%	8.34%	9.56%	6.38%	6.38%	6.3		
2017	21.53%	14.26%	10.96%	12.44%	12.44%	12.4		
2017	-4.89%	-2.47%	-3.93%	-3.52%	-3.52%	-3.5		
2019 2020	31.04% 20.77%	21.98% 14.73%	17.86% 14.53%	20.11% 15.20%	20.11% 24.05%	20.° 34.8		
2021	26.32%	15.74%	8.89%	11.65%	17.57%	23.4		
2022	-19.19%	-15.86%	-12.84%	-6.09%	-8.17%	-10.1		
2023	26.42%	17.66%	12.38%	12.51%	14.02%	15.4		
2024	10.48%	6.09%	4.24%	9.57%	9.57%	9.5		
60/40 YTD:	4.4%	0.0%	-1.9%	3.5%	3.5%	3		



Strategy Fact Sheets

Dual Momentum Strategies: Bamboo Allocation

A fixed allocation strategy rebalanced annually

Results through 06/01/2024

Investment selection for July 2024:

IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%

Tax friendliness:

Bamboo Allocation has mostly Long Term Cap Gains.

Average number of trades per year (including Rebalancing)

1.00

Strategy Description:

The Bamboo Allocation allocations strategies are for somebody who doesn't want straight up S&P, or a 60/40, but they want something not as volatile and with as much downside as holding the S&P, but also something that is more suited to the changing market conditions than is a 60/40. The base Bamboo Allocation never uses any leverage, the Bamboo+ Allocation uses 2X Leverage only for the 55% US Large Cap position using the Smart Leverage rules of the Dual Momentum Strategies, and the Bamboo++ Allocation uses 3X Leverage using Smart Leverage.

Portfolio size appropriateness:

Whale, Bamboo Allocation can be used for any sized portfolio.

Characteristics:

Drawdowns: Bamboo Allocation has more conservative drawdowns than the S&P and very similar to 60/40.

Volatility: Bamboo Allocation is usually less volatile than the S&P and 60/40over time.

Returns: Bamboo Allocation will perform more similar to a 60/40, but can outperform it and the S&P over longer cycles.

Leverage: Bamboo Allocation never uses any leverage.

Leverage	2000+
Average	100%
Maximum	100%

Metric	2000+
Beta	0.39
Alpha	4.06%

Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo Allocation	9.57%	15.08%	6.67%	9.94%	7.65%	7.13%	9.12%
Balanced 60/40	6.09%	12.57%	3.96%	8.43%	8.05%	6.17%	9.93%
Russell 1000	10.48%	19.83%	7.46%	13.75%	12.01%	7.45%	11.81%

Maximum Drawdrown single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo Allocation	-0.64%	-3.74%	-8.38%	-8.38%	-8.38%	-16.44%	-16.44%
Balanced 60/40	-3.38%	-6.84%	-20.09%	-20.09%	-20.09%	-32.33%	-32.33%
Russell 1000	-4.18%	-8.67%	-24.57%	-24.57%	-24.57%	-51.03%	-51.03%

Ulcer Index the higher the number the more painful downside volatility. Considers all downside.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo Allocation	0.24	1.50	3.14	2.80	2.67	3.53	3.04
Balanced 60/40	1.28	2.56	9.03	7.25	5.33	7.89	6.21
Russell 1000	1.58	3.25	10.58	8.87	6.77	16.43	12.92

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo Allocation	8.11	2.47	0.28	0.84	0.48	0.38	0.78
Balanced 60/40	1.28	1.12	(0.06)	0.41	0.42	0.17	0.72
Russell 1000	2.35	1.78	0.28	0.76	0.70	0.28	0.67

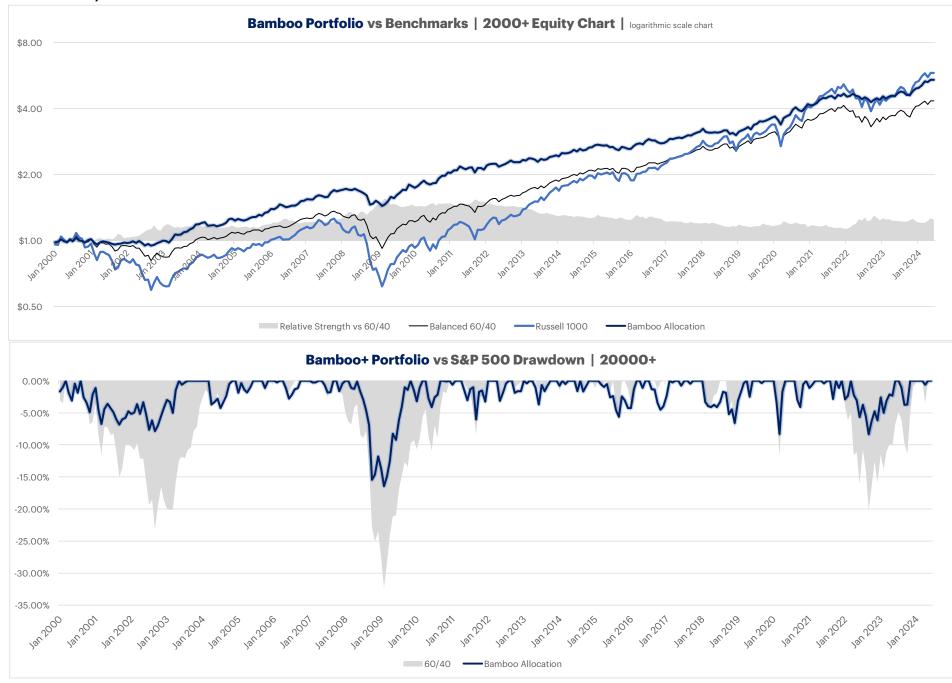
Mininum, Average, and Maximum monthly performance.

	Bamboo	Bamboo+	Bamboo++
MIN	-9.2%	-9.16%	-9.16%
AVE	0.5%	0.58%	0.70%
MAX	9.4%	11.61%	16.51%

Allocation Stats from 1980+

	Bamboo	Bamboo+	Bamboo++
Winning Months	347	343	343
Ave Winning Month	1.01%	1.17%	1.34%
Total Gain	688%	811%	952%
Net Gain	404%	489%	585%
Win to Loss Ratio	2.42	2.52	2.60
Gain to Pain Ratio	1.42	1.52	1.60
Losing Months	186	190	190
Ave Losing Month	-1.53%	-1.70%	-1.93%
Total Loss	-284%	-322 %	-367%

Dual Momentum Systems: LT Gain+



Dual Momentum Strategies: Bamboo+ Allocation

A fixed allocation strategy rebalanced annually

Results through 06/01/2024

Investment selection for July 2024:

IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%

Tax friendliness:

Bamboo+ Allocation has mostly Long Term Cap Gains.

Average number of trades per year (including Rebalancing)

1.69

Strategy Description:

The Bamboo Allocation allocations strategies are for somebody who doesn't want straight up S&P, or a 60/40, but they want something not as volatile and with as much downside as holding the S&P, but also something that is more suited to the changing market conditions than is a 60/40. The base Bamboo Allocation never uses any leverage, the Bamboo+ Allocation uses 2X Leverage only for the 55% US Large Cap position using the Smart Leverage rules of the Dual Momentum Strategies, and the Bamboo++ Allocation uses 3X Leverage using Smart Leverage.

Portfolio size appropriateness:

Whale, Bamboo+ Allocation can be used for any sized portfolio.

Characteristics:

Drawdowns: Bamboo+ Allocation has more conservative drawdowns than the S&P and very similar to 60/40.

Volatility: Bamboo+ Allocation is usually less volatile than the S&P and 60/40over time.

Returns: Bamboo+ Allocation will perform more similar to a 60/40, but can outperform it and the S&P over longer cycles.

Leverage: Bamboo+ Allocation never uses any leverage.

Leverage	2000+
Average	109%
Maximum	140%

Metric	2000+
Beta	0.46
Alpha	5.49%

Annualized Returns actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo+ Allocation	9.57%	12.43%	6.43%	12.54%	8.91%	9.10%	11.09%
Balanced 60/40	6.09%	12.57%	3.96%	8.43%	8.05%	6.17%	9.93%
Russell 1000	10.48%	19.83%	7.46%	13.75%	12.01%	7.45%	11.81%

Maximum Drawdrown single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo+ Allocation	-0.64%	-7.17%	-8.38%	-8.38%	-8.38%	-16.44%	-16.44%
Balanced 60/40	-3.38%	-6.84%	-20.09%	-20.09%	-20.09%	-32.33%	-32.33%
Russell 1000	-4.18%	-8.67%	-24.57%	-24.57%	-24.57%	-51.03%	-51.03%

Ulcer Index the higher the number the more painful downside volatility. Considers all downside.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo+ Allocation	0.24	3.01	3.76	3.35	2.98	3.81	3.24
Balanced 60/40	1.28	2.56	9.03	7.25	5.33	7.89	6.21
Russell 1000	1.58	3.25	10.58	8.87	6.77	16.43	12.92

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo+ Allocation	8.11	1.11	0.21	1.08	0.66	0.69	1.06
Balanced 60/40	1.28	1.12	(0.06)	0.41	0.42	0.17	0.72
Russell 1000	2.35	1.78	0.28	0.76	0.70	0.28	0.67

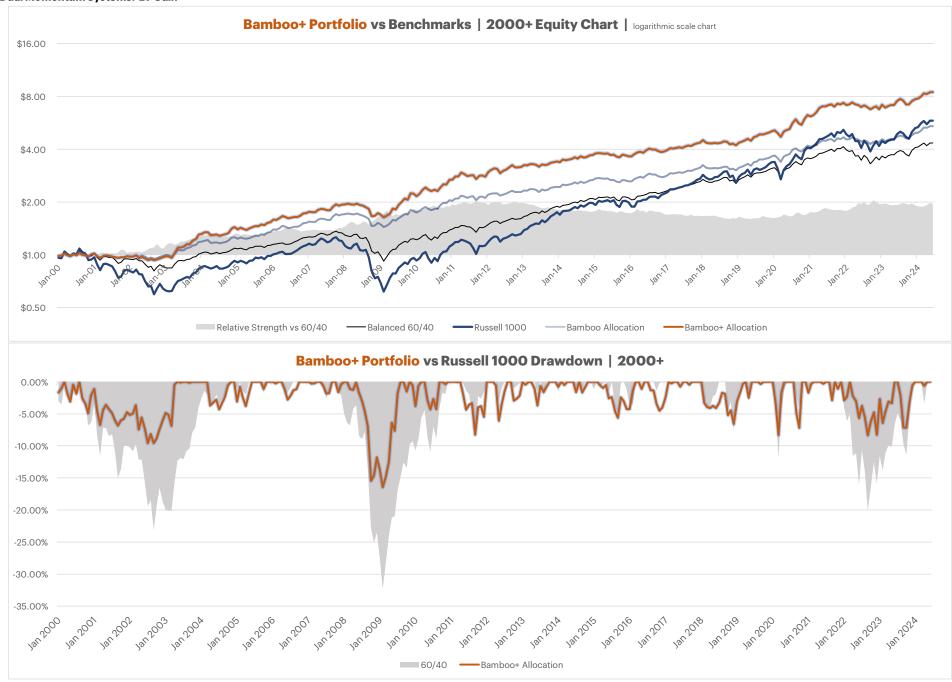
Mininum, Average, and Maximum monthly performance.

	Bamboo	Bamboo+	Bamboo++
MIN	-9.2%	-9.16%	-9.16%
AVE	0.5%	0.58%	0.70%
MAX	9.4%	11.61%	16.51%

Allocation Stats from 1980+

	Bamboo	Bamboo+	Bamboo++
Winning Months	347	343	343
Ave Winning Month	1.01%	1.17 %	1.34%
Total Gain	688%	811%	952 %
Net Gain	404%	489%	585%
Win to Loss Ratio	2.42	2.52	2.60
Gain to Pain Ratio	1.42	1.52	1.60
Losing Months	186	190	190
Ave Losing Month	-1.53%	-1.70%	-1.93%
Total Loss	-284%	-322 %	-367 %

Dual Momentum Systems: LT Gain+



Dual Momentum Strategies: Bamboo++ Allocation

A fixed allocation strategy rebalanced annually

Results through 06/01/2024

Investment selection for July 2024:

IWB: 40%, BND: 20%, DBMF: 20%, SGOL: 20%

Tax friendliness:

Bamboo++ Allocation has mostly Long Term Cap Gains.

Average number of trades per year (including Rebalancing)

1.69

Strategy Description:

The Bamboo Allocation allocations strategies are for somebody who doesn't want straight up S&P, or a 60/40, but they want something not as volatile and with as much downside as holding the S&P, but also something that is more suited to the changing market conditions than is a 60/40. The base Bamboo Allocation never uses any leverage, the Bamboo+ Allocation uses 2X Leverage only for the 55% US Large Cap position using the Smart Leverage rules of the Dual Momentum Strategies, and the Bamboo++ Allocation uses 3X Leverage using Smart Leverage.

Portfolio size appropriateness:

Whale, Bamboo++ Allocation can be used for any sized portfolio.

Characteristics:

Drawdowns: Bamboo++ Allocation has more conservative drawdowns than the S&P and very similar to 60/40.

Volatility: Bamboo++ Allocation is usually less volatile than the S&P and 60/40over time.

Returns: Bamboo++ Allocation will perform more similar to a 60/40, but can outperform it and the S&P over longer cycles.

Leverage: Bamboo++ Allocation never uses any leverage.

Leverage	2000+
Average	118%
Maximum	180%

Metric	2000+
Beta	0.46
Alpha	5.49%

Annualized Returns, actual YTD for current year.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo++ Allocation	9.57%	9.64%	6.14%	15.32%	10.25%	11.26%	13.25%
Balanced 60/40	6.09%	12.57%	3.96%	8.43%	8.05%	6.17%	9.93%
Russell 1000	10.48%	19.83%	7.46%	13.75%	12.01%	7.45%	11.81%

Maximum Drawdrown, single largest drawdown.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo++ Allocation	-0.64%	-10.81%	-10.81%	-10.81%	-10.81%	-16.44%	-16.44%
Balanced 60/40	-3.38%	-6.84%	-20.09%	-20.09%	-20.09%	-32.33%	-32.33%
Russell 1000	-4.18%	-8.67%	-24.57%	-24.57%	-24.57%	-51.03%	-51.03%

Ulcer Index, the higher the number the more painful downside volatility. Considers all downside.

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo++ Allocation	0.24	5.00	4.71	4.19	3.47	4.28	3.61
Balanced 60/40	1.28	2.56	9.03	7.25	5.33	7.89	6.21
Russell 1000	1.58	3.25	10.58	8.87	6.77	16.43	12.92

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

Investment	YTD	1 Year	3 Year	5 Year	10 Year	2000+	1980+
Bamboo++ Allocation	8.11	0.52	0.17	1.22	0.78	0.94	1.28
Balanced 60/40	1.28	1.12	(0.06)	0.41	0.42	0.17	0.72
Russell 1000	2.35	1.78	0.28	0.76	0.70	0.28	0.67

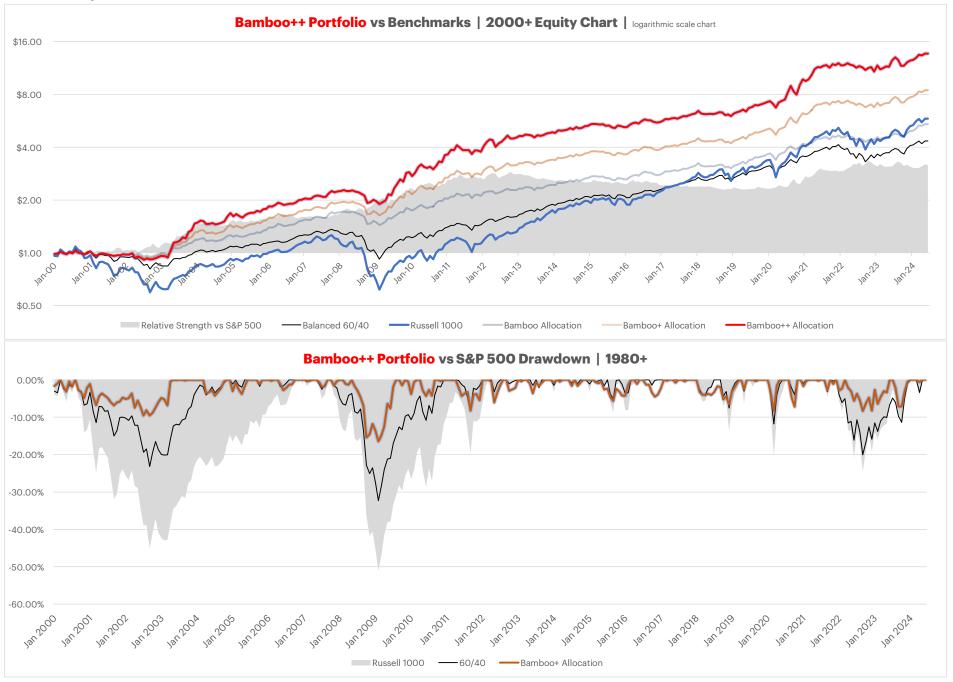
Mininum, Average, and Maximum monthly performance.

	Bamboo	Bamboo+	Bamboo++
MIN	-9.2%	-9.16%	-9.16%
AVE	0.5%	0.58%	0.70%
MAX	9.4%	11.61%	16.51%

Allocation Stats from 1980+

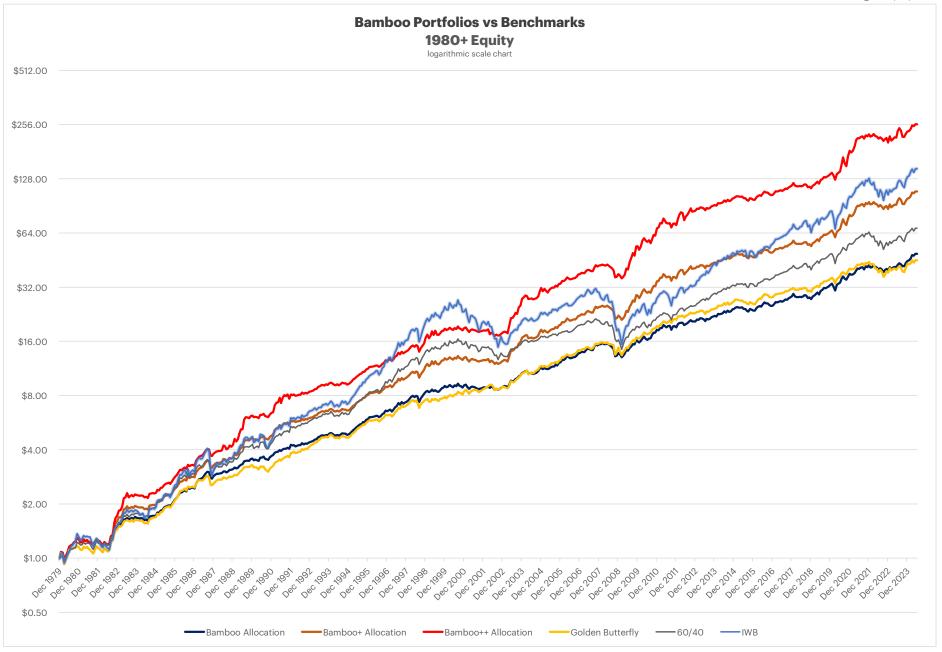
	Bamboo	Bamboo+	Bamboo++
Winning Months	347	343	343
Ave Winning Month	1.01%	1.17 %	1.34%
Total Gain	688%	811%	952%
Net Gain	404%	489%	585%
Win to Loss Ratio	2.42	2.52	2.60
Gain to Pain Ratio	1.42	1.52	1.60
Losing Months	186	190	190
Ave Losing Month	-1.53%	-1.70%	-1.93%
Total Loss	-284%	-322 %	-367 %

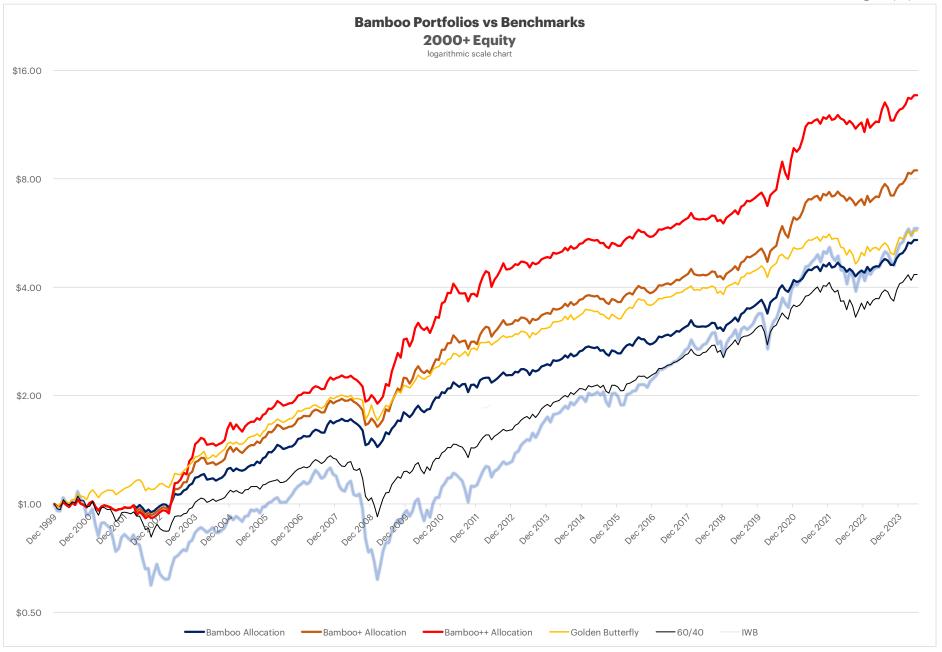
Dual Momentum Systems: LT Gain+





Equity & Return Charts







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

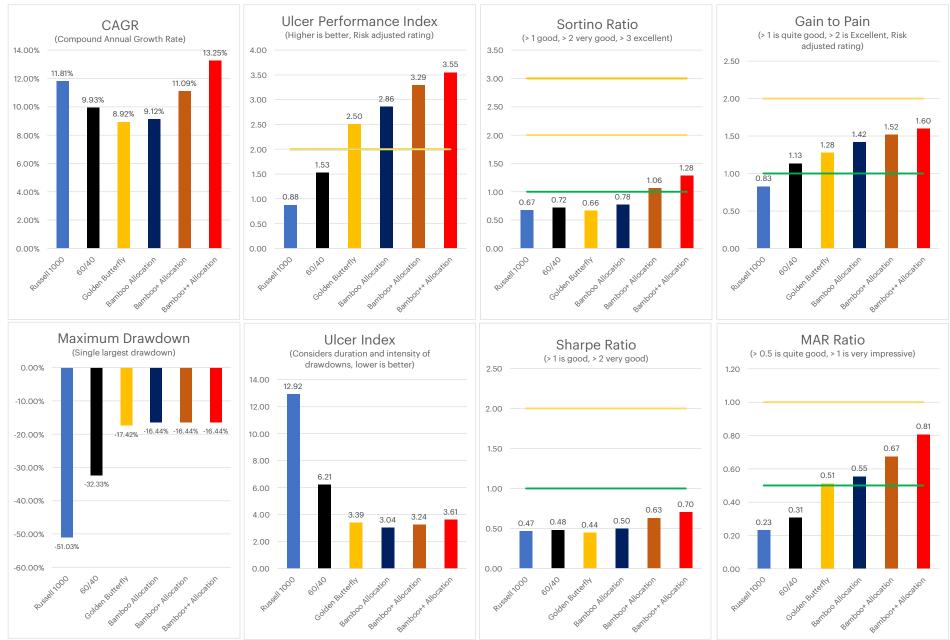
Maximum Drawdown: The largest negative drawdown for the strategy, on a month end basis

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

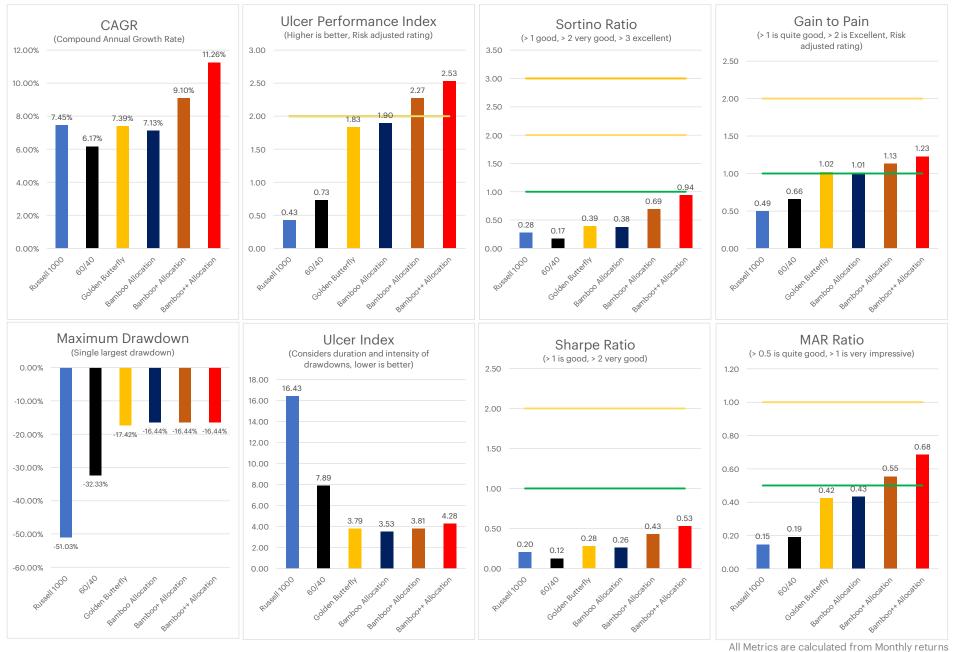
Sharpe Ratio: A commonly used risk adjusted performance measure, however, it penalizes for upside volatility

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

Metrics Comparisons: Bamboo Allocations vs Russell 1000 & 60/40 & Golden Butterfly 1980 to current



Metrics Comparisons: Bamboo Allocations vs Russell 1000 & 60/40 & Golden Butterfly 2000 to current



36 Month Strategy Return Correlations

 \leftarrow Conservative Aggressive \rightarrow Balanced 60/40 Bamboo Allocation Bamboo+ Allocation Bamboo++ Allocatio **IWB IWB** 100% Balanced 60/40 100% 99% 91% 95% 100% **Bamboo Allocation** 91% 90% **92%** 100% **Bamboo+ Allocation 87**% 86% 88% 96% 100% **79**% **Bamboo++ Allocation** 81% 98% 90% 98% 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 the DMS 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!