



# The Alpha Sheet

## Dual Defense™ Portfolios

November 30, 2023

### Professional Portfolio Management – Simplified

The Alpha Sheet high-performance investment management models will simplify and improve your advisory services. Risk mitigation is always Job-One. Our Dual Defense™ Portfolios employ two independent methods for determining when to own defensive funds versus equities. The Alpha Sheet is published in full at each monthly (and special) rebalance, and weekly as The Sunday Snapshot of current market activity.

#### Introducing The Alpha Sheet



How to Subscribe

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# StormGuard™ Defensive Snapshot

November 30, 2023

## Overview

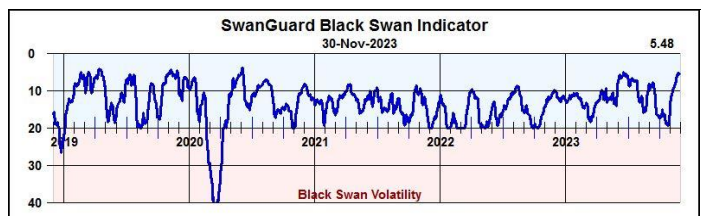
Introducing StormGuard

StormGuard incorporates three primary views of the market: Market Trend, Institutional Momentum and Value Sentiment. Twelve separate measures of these three views are logically combined to produce the StormGuard-Armor composite value. Four additional measures of volatility and oversold conditions help hasten exits for Black Swan market crash events and help hasten re-entry following strong rebound events.



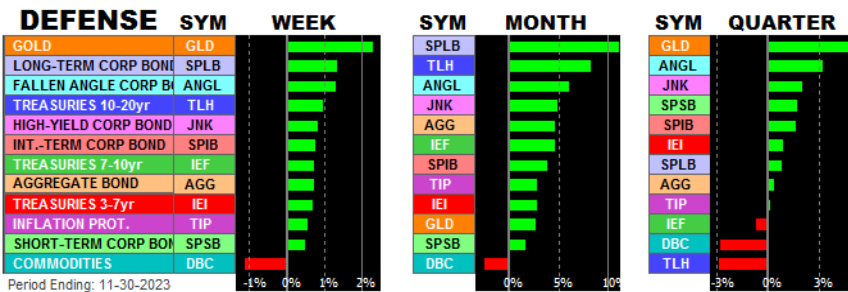
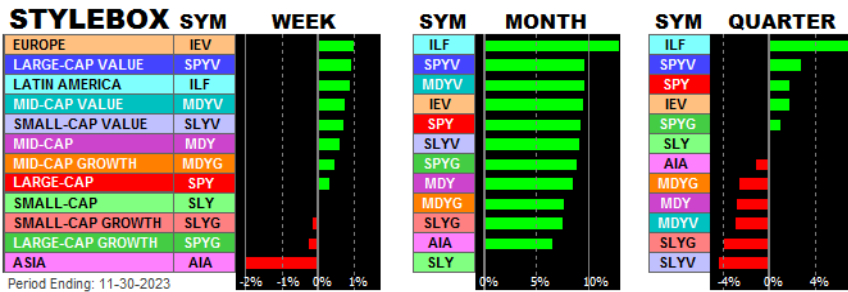
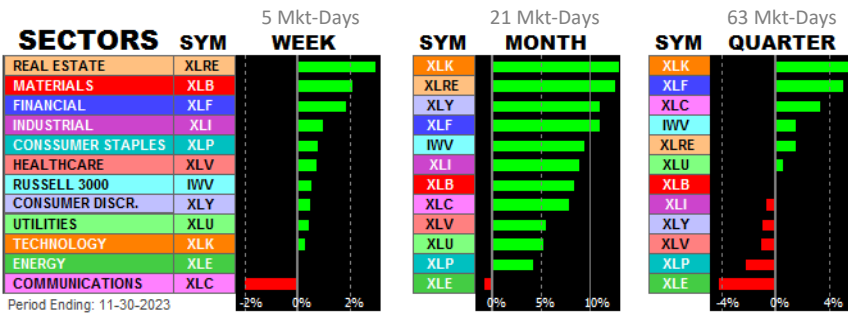
Deeper Dive Info.

StormGuard considers numerous indicators.



**Automated Narrative:** " StormGuard indicates market safety is marginal and declining. NOTE: StormGuard-Armor, like a smoke alarm, is not perfectly clairvoyant but helps improve your long-term batting average."

See Legal-Disclaimer page for technical terms, historical data, and service limits information. Performance updated daily.



Which Trend Is My Friend? Why These Aren't Trade Signals

Thematic Dual Defense™ Portfolios			
Link	CAGR	Risk No	MaxDD
<a href="#">Alpha Bonds</a>	8.6%	25	10.0%
<a href="#">Merlyn.AI SNUG Index *</a>	14.7%	28	12.0%
<a href="#">Alpha Stylebox DD</a>	19.6%	33	25.0%
<a href="#">Alpha Sectors DD</a>	24.9%	31	18.0%
<a href="#">Alpha Global DD</a>	20.3%	33	16.0%
<a href="#">Alpha Green DD</a>	16.9%	44	17.0%
<a href="#">Alpha Innovation DD</a>	23.3%	48	26.0%
<a href="#">Alpha Stocks DD</a>	37.7%	28	22.0%

Blended Dual Defense™ Portfolios			
Link	CAGR	Risk No	MaxDD
<a href="#">Alpha 20:80 DD</a>	10.7%	22	8.0%
<a href="#">Alpha 40:60 DD</a>	13.5%	22	9.0%
<a href="#">Alpha 60:40 Core DD</a>	14.8%	25	10.0%
<a href="#">Alpha 60:40 Sectors DD</a>	17.3%	23	12.0%
<a href="#">Alpha 60:40 Global DD</a>	13.9%	24	10.0%
<a href="#">Alpha 60:40 Green DD</a>	14.1%	24	10.0%
<a href="#">Alpha 60:40 Stocks DD</a>	27.7%	23	16.0%
<a href="#">Alpha 80:20 DD</a>	18.6%	25	12.0%

[How to Blend These Models](#)

[Benchmark Construction Page](#)

CAGR = Compound Annual Growth Rate

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name
1	SPSB 25.0	SPDR Portfolio Short-Term Corp Bd ETF
2	FALN 25.0	iShares Fallen Angels USD Bond ETF
3	GLD 25.0	SPDR Gold ETF
4	VGSH 25.0	Vanguard Short-Term Treasury ETF

## Alpha Bonds Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 05-07-2011** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: BMS-B,Y** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: BND** U.S. Aggregate Bond Index.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>25.6</b>	<b>8.5%</b>	<b>10%</b>
<b>Benchmark</b>	<b>30.3</b>	<b>3.0%</b>	<b>18%</b>

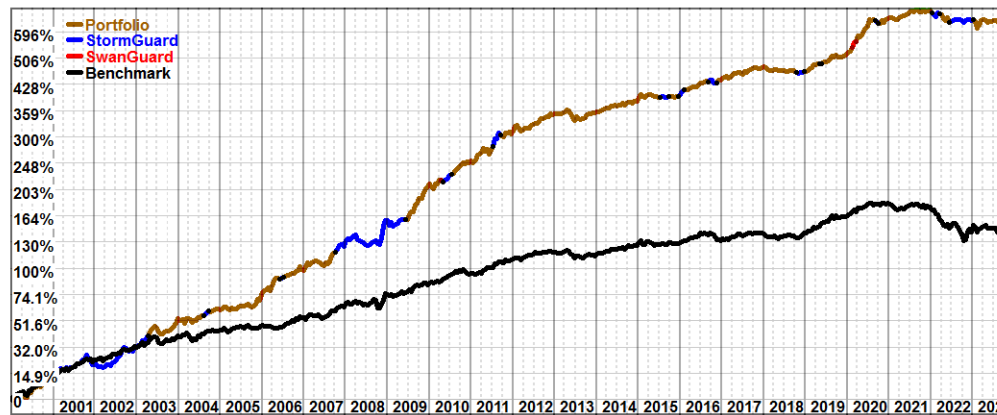
Statistics measured from 6/1/2004 by AlphaDroid.

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**RISK**  
26

**CAGR**  
8.5

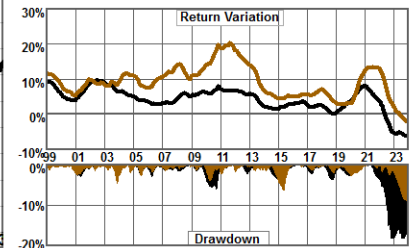
Percent



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Portfolio</b>	10.5%	12.6%	7.8%	6.3%	16.4%	13.7%	13.5%	18.8%	15.1%	14.7%	10.7%	1.0%	6.4%	2.5%	9.1%	6.7%	-1.9%	8.6%	22.0%	4.8%	-5.8%	
<b>Benchmark</b>	8.3%	4.0%	4.2%	2.4%	4.3%	7.3%	6.9%	3.6%	6.2%	7.9%	3.9%	-2.1%	5.8%	0.6%	2.5%	3.6%	-0.1%	8.8%	7.7%	-1.9%	-13.0%	

Hypothetical portfolio model performance assumes trade signals provided are executed at the close of the subsequent market day. Past performance does not guarantee future performance. Copyright 2023 SumGrowth Strategies, LLC all rights reserved.

Underlying Strategies	Weight
1. Bonds SPDR	25.0%
2. Bonds iShares	25.0%
3. Gold'n Yield	25.0%
4. Treasuries	25.0%



	YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
<b>Portfolio</b>	0.6%	0.1%	0.7%	5.8%	5.1%	8.4%
<b>Benchmark</b>	2.0%	1.2%	-4.4%	0.8%	1.4%	3.0%

## Methodology

Tactical Momentum Strategies. Each of the four underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. Candidate ETFs are defensive ETFs vs equity ETFs.

## Portfolio Construction

[More Charts](#)

Selections are made from a universe of over 48 ETFs that include a wide range of bond and Treasury categories, gold, and the S&P 500 index. The Strategy includes an integrated Bear Market Strategy, which limits the selection to a less aggressive fund universe.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Fixed Income	Month-End	Exit market quickly for a for Black Swan event. Get back in early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. Ultra short-term bonds act as a momentum backstop.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

Model Rebalanced: Dec-01-2023

Status: **BULL Market**

Sym	%	Fund Name
1 NLR	20.0	VanEck UraniumNuclear Energy ETF
2 USDU	15.0	WisdomTree Blmbg US Dollar Bullish ETF
3 DBC	20.0	Invesco DB Commodity Index Tracking ETF
4 PULS	15.0	PGIM Ultra Short Bond ETF
5 COMT	15.0	iShares GSCI Comdity Dync Roll Strat ET
6 UUP	15.0	Invesco DB US Dollar Index Bullish

### SNUG Tactical Risk Mitigation Index

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 01-06-2025 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** BMS-W-Y Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B6040 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>28.5</b>	<b>15.0%</b>	<b>12%</b>
<b>Benchmark</b>	<b>49.5</b>	<b>6.7%</b>	<b>36%</b>

Statistics measured from 6/1/2004 by AlphaDroid.

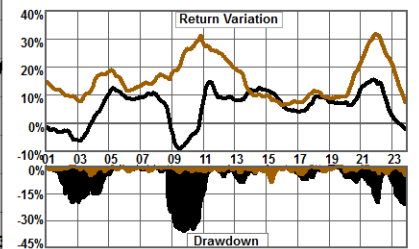
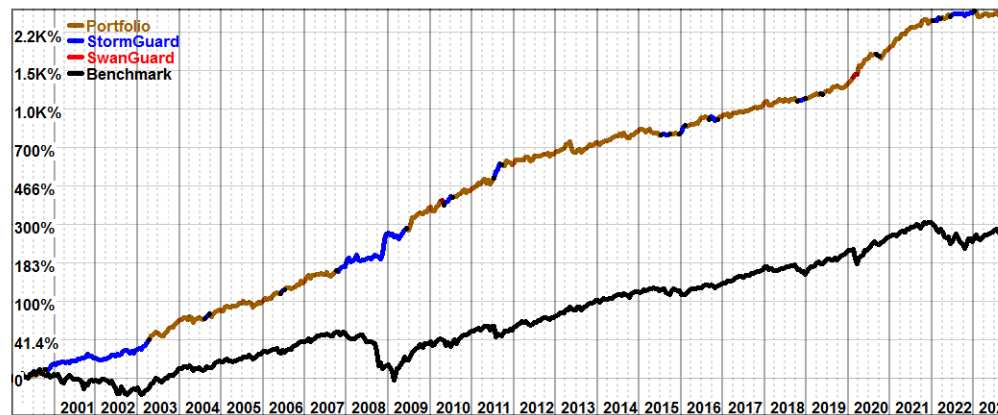
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**RISK**  
29



**CAGR**  
15

Strategy	Wt.	Strategy	Wt.
SNUG Defensive Alternati	20%	SNUG Bonds-Bonds-Bond	15.0%
SNUG Comdty-Bond-Tran	20%	SNUG REIT-Bonds-Treasu	15.0%
SNUG REIT-Cmdty-Bond	15.0%	SNUG Gold-Bonds-Treas	15.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	8.7%	28.4%	10.8%	6.6%	20.8%	17.1%	32.5%	25.1%	19.3%	24.3%	10.1%	11.0%	9.7%	-1.5%	16.0%	12.2%	5.8%	12.3%	40.5%	27.3%	7.7%
<b>Benchmark</b>	-8.6%	20.3%	9.3%	5.7%	12.1%	7.6%	-23.3%	18.7%	11.1%	2.3%	11.6%	16.6%	7.5%	1.3%	5.6%	14.7%	-4.0%	21.5%	15.7%	13.6%	-16.2%

Hypothetical portfolio model performance assumes trade signals provided are executed at the close of the subsequent market day. Past performance does not guarantee future performance. Copyright 2023 SumGrowth Strategies, LLC all rights reserved.

Methodology		Portfolio Construction		
<p>The Merlyn.AI SNUG Tactical Risk Mitigation Index employs six underlying strategies that use a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end. The trend leader of each become a member of the model's Portfolio for the subsequent month. Candidate ETFs include equity and defensive ETFs.</p>		<p>Selections are made from a universe of over 60 ETFs that include a wide range of bond and Treasury categories, gold, and the S&amp;P 500 index. A simple 60/40 portfolio forms the model's backbone, which is challenged for momentum leadership by the defensive ETFs. It is further defended by an integrated Bear Market Strategy, triggered by StormGuard.</p>		
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Conservative	Month-End	Exit market quickly for a for Black Swan event. Get back in early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name
1	QQQ 25.0	Invesco QQQ ETF
2	ONEQ 25.0	Fidelity NASDAQ Composite Index ETF
3	VONG 25.0	Vanguard Russell 1000 Growth ETF
4	IWY 25.0	iShares Russell Top 200 Growth ETF

## Alpha Stylebox DD Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 05-25-2006** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: BMS-W,Y,J** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: S&P500** The S&P500 U.S. stock market index.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>36.4</b>	<b>18.0%</b>	<b>25%</b>
<b>Benchmark</b>	<b>75.9</b>	<b>9.7%</b>	<b>55%</b>

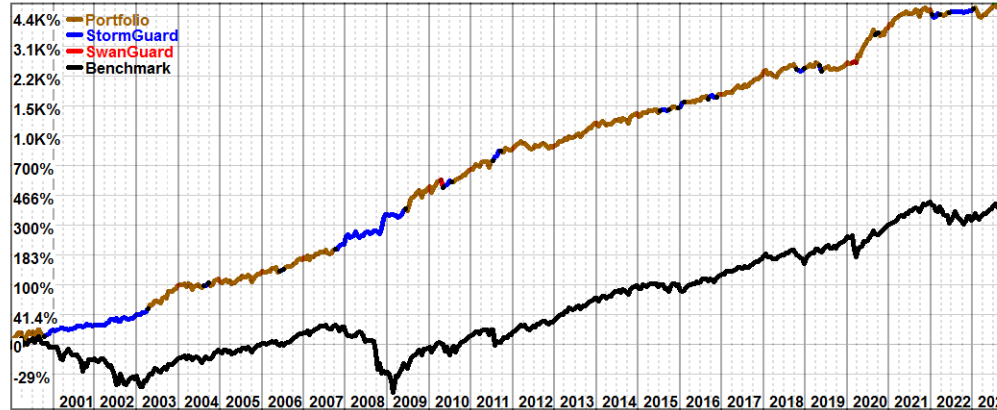
Statistics measured from 6/1/2004 by AlphaDroid.

**RISK**  
**36**  
Riskalyze

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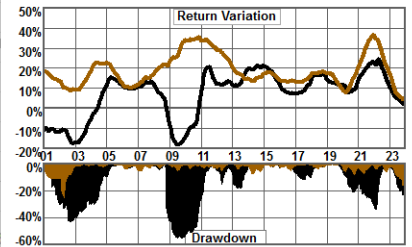


**CAGR**  
**18**  
Percent



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	13.9%	37.7%	10.2%	4.3%	19.0%	23.5%	38.5%	33.5%	23.9%	26.8%	3.9%	31.9%	9.5%	9.1%	15.0%	26.9%	8.7%	4.4%	53.5%	22.6%	-1.0%
<b>Benchmark</b>	-22.1%	28.7%	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%

Underlying Strategies	Weight
1. Stylebox SPDR DD	25.0%
2. Stylebox iShares DD	25.0%
3. Stylebox Vanguard DD	25.0%
4. Stylebox Russell DD	25.0%



YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
<b>5.8%</b>	<b>6.3%</b>	<b>10.7%</b>	<b>16.4%</b>	<b>14.9%</b>	<b>18.0%</b>
<b>20.8%</b>	<b>13.9%</b>	<b>9.8%</b>	<b>12.5%</b>	<b>11.8%</b>	<b>9.7%</b>

## Methodology

Tactical Momentum Strategies. Each of the four underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

## Portfolio Construction

[More Charts](#)

The ETF selection is made from a field of 44 classic Stylebox ETFs divided among SPDR, iShares, Vanguard, and Russell. The underlying strategies employ a momentum backstop having defensive funds that compete for momentum leadership with the 44 Stylebox ETFs. The Strategy includes a defensive integrated Bear Market Strategy, triggered by StormGuard.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Conservative	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name
1 XLE	25.0	Energy Select Sector SPDR ETF
2 QQQ	25.0	Invesco QQQ ETF
3 IYW	25.0	iShares US Technology ETF
4 VDE	25.0	Vanguard Energy ETF

## Alpha Sectors DD Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 03-06-2007** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: BMS-W,J,O,Y** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: S&P500** The S&P500 U.S. stock market index.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>35.8</b>	<b>24.4%</b>	<b>18%</b>
<b>Benchmark</b>	<b>75.9</b>	<b>9.7%</b>	<b>55%</b>

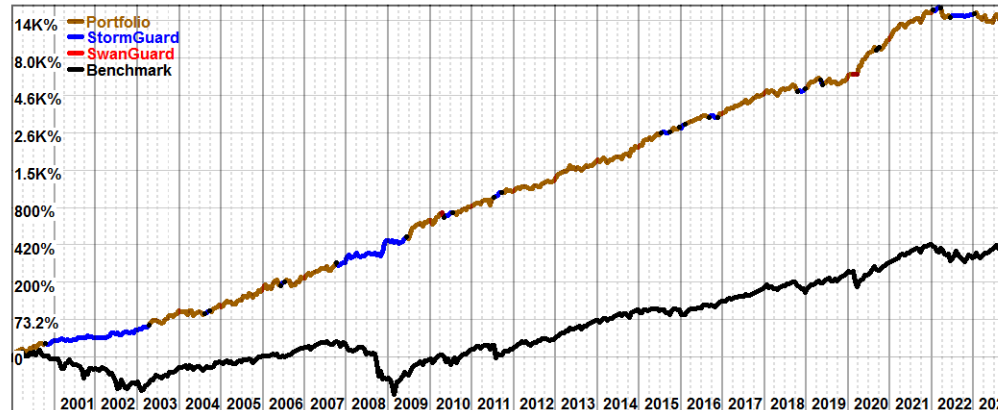
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

**RISK**  
**36**  
Riskalyze

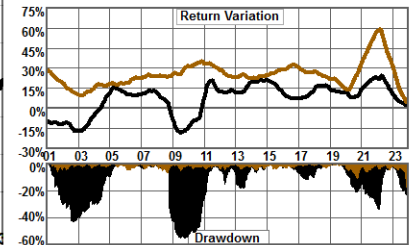


**CAGR**  
**24**  
Percent



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Portfolio</b>	13.5%	26.8%	12.1%	22.5%	22.8%	28.7%	34.9%	33.0%	24.6%	22.7%	19.8%	30.9%	22.4%	34.3%	21.3%	33.3%	9.3%	15.3%	78.5%	48.5%	-3.0%	
<b>Benchmark</b>	-22.1%	28.7%	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%	

Underlying Strategies	Weight
1. Sectors SPDR-9 DD	25.0%
2. Sectors SPDR Gold DD	25.0%
3. Sectors iShares DD	25.0%
4. Sectors Aggressive DD	25.0%



	YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
<b>Portfolio</b>	-5.0%	-4.6%	12.9%	23.9%	23.7%	24.4%
<b>Benchmark</b>	20.8%	13.9%	9.8%	12.5%	11.8%	9.7%

Methodology		Portfolio Construction		
Tactical Momentum Strategies. Each of the four underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.		The Sector ETF selections are made from a field of 44 sector and sub-sector ETFs from multiple asset managers. The underlying strategies employ a momentum backstop having defensive funds that compete for momentum leadership with the 44 Sector ETFs. The Strategy includes a defensive integrated Bear Market Strategy, triggered by StormGuard.		
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Moderate	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

Model Rebalanced: Dec-01-2023

Status: **BULL Market**

Sym	%	Fund Name
1 IOO	25.0	iShares Global 100 ETF
2 QQQ	25.0	Invesco QQQ ETF
3 EDIV	25.0	SPDR S&P Emerging Markets Dividend ETF
4 FILL	25.0	iShares MSCI Global Energy Producers ET

## Alpha Global DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 12-24-2006 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** BMS-W,Y Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** S&P500 The S&P500 U.S. stock market index.

### Hypothetical Performance

	RISK	CAGR	MaxDD
Portfolio	34.1	21.4%	16%
Benchmark	75.9	9.7%	55%

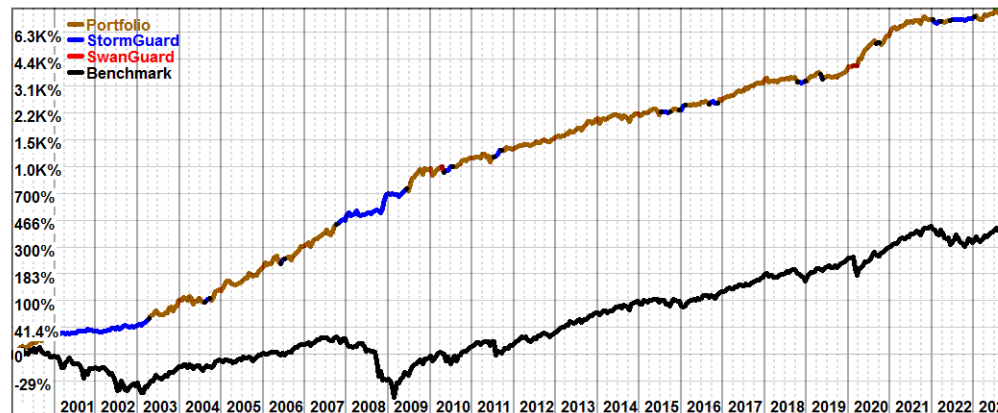
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

**RISK**  
34  
Riskalyze



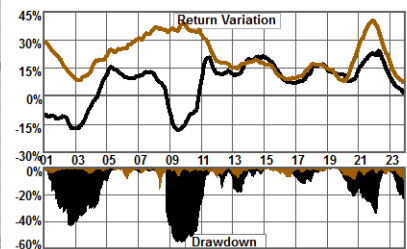
**CAGR**  
21  
Percent



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Portfolio	8.6%	30.9%	22.4%	26.1%	38.3%	41.8%	36.8%	36.6%	17.0%	11.3%	15.8%	28.1%	5.0%	6.7%	13.0%	26.4%	1.7%	15.3%	57.6%	21.5%	1.5%	
Benchmark	-22.1%	28.7%	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%	

Hypothetical portfolio model performance assumes trade signals provided are executed at the close of the subsequent market day. Past performance does not guarantee future performance. Copyright 2023 SumGrowth Strategies, LLC all rights reserved.

Underlying Strategies	Weight
1. Global Regions iSh DD	25.0%
2. Global Countries DD	25.0%
3. Global Regions SPDR DD	25.0%
4. Global Sectors DD	25.0%



	YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
Portfolio	12.8%	13.4%	13.8%	21.0%	15.5%	21.3%
Benchmark	20.8%	13.9%	9.8%	12.5%	11.8%	9.7%

## Methodology

Tactical Momentum Strategies. Each of the four underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

## Portfolio Construction

[More Charts](#)

The Global ETF selections are made from a field of 43 country, region, and sector ETFs from various asset managers. The underlying strategies employ a momentum backstop having defensive funds that compete for momentum leadership with the 43 Global ETFs. The Strategy includes a defensive integrated Bear Market Strategy, triggered by StormGuard.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Moderate	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name
1	ESGY 25.0	American Century Sustainable Growth ETF
2	PHO 25.0	Invesco Water Resources ETF
3	DBC 12.5	Invesco DB Commodity Index Tracking ETF
4	COMT 12.5	iShares GSCI Comdity Dync Roll Strat ET
5	GSG 12.5	iShares S&P GSCI Commodity Indexed ETF
6	UUP 12.5	Invesco DB US Dollar Index Bullish

## Alpha Green DD Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 11-12-2015** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: BMS-W,0,Z** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: S&P500** The S&P500 U.S. stock market index.

### Hypothetical Performance

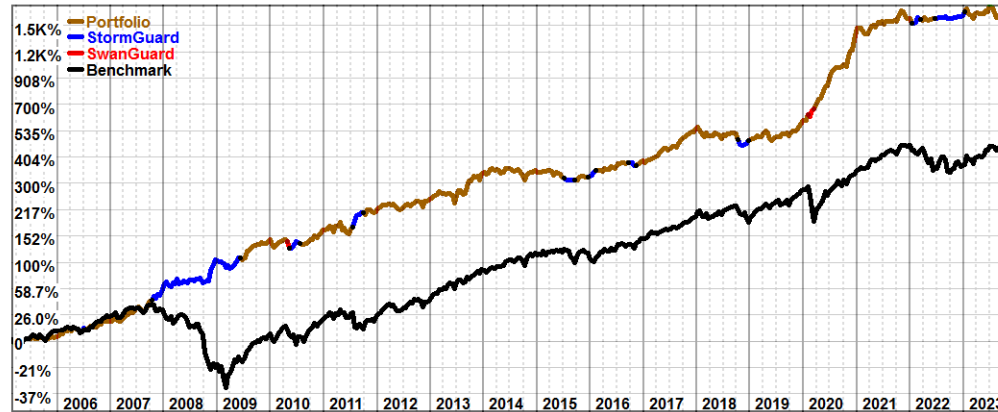
	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>46.1</b>	<b>16.3%</b>	<b>17%</b>
<b>Benchmark</b>	<b>76.9</b>	<b>9.5%</b>	<b>55%</b>

Statistics measured from 6/1/2004 by AlphaDroid.

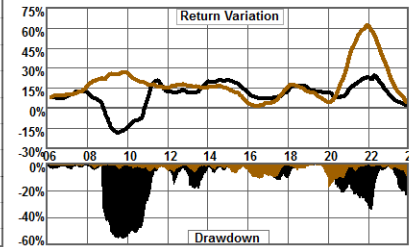
Nov 30, 2023

**RISK**  
46  
Riskalyze

**CAGR**  
16  
Percent



Underlying Strategies	Weight
1. Sustainable Future DD	25.0%
2. Clean Water DD	25.0%
3. Clean Energy DD	25.0%
4. Electric Vehicles DD	25.0%



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022				
<b>Portfolio</b>	-	-	-	-	14.3%	31.3%	31.1%	17.6%	9.5%	18.1%	10.3%	26.9%	2.1%	-5.2%	13.1%	33.3%	-8.6%	16.5%	113.2%	20.4%	-0.4%
<b>Benchmark</b>	-	-	-	-	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%

YTD	1-Yr	3-Yr	5-Yr	10-Yr	18-Yr
-3.0%	-2.5%	9.9%	24.6%	14.7%	16.3%
20.8%	13.9%	9.8%	12.5%	11.8%	9.5%

Methodology		Portfolio Construction		
Tactical Momentum Strategies. Each of the four underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.		The Green ETF selections are made from a field of 32 sustainable, clean water, clean energy, and electric vehicle ETFs. The underlying strategies employ a momentum backstop having defensive funds that compete for momentum leadership with the 32 Green ETFs. The Strategy includes a defensive integrated Bear Market Strategy, triggered by StormGuard.		
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Moderate	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

Model Rebalanced: Dec-01-2023

Status: **BULL Market**

Sym	%	Fund Name
1 QQQ	75.0	Invesco QQQ ETF
2 XLK	25.0	Technology Select Sector SPDR ETF

## Alpha Innovation DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 01-03-2019 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** BMS-G,M Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** S&P500 The S&P500 U.S. stock market index.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>51.3</b>	<b>21.8%</b>	<b>26%</b>
<b>Benchmark</b>	<b>75.9</b>	<b>9.7%</b>	<b>55%</b>

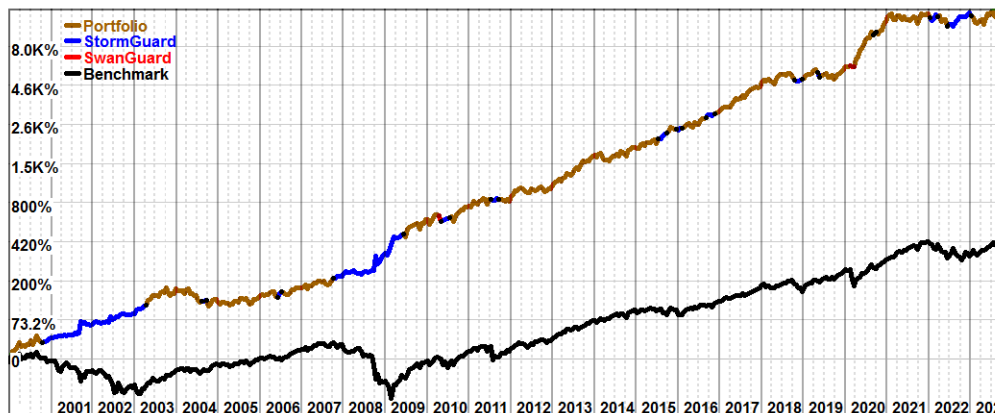
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

**RISK**  
51  
Riskalyze



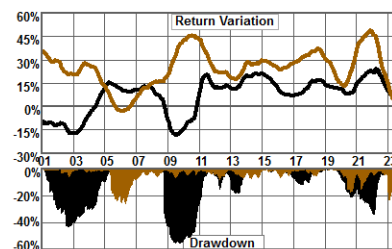
**CAGR**  
22  
Percent



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	18.9%	35.1%	-10.9%	1.5%	14.8%	20.6%	34.1%	63.1%	18.3%	10.5%	19.2%	58.2%	10.3%	31.0%	24.7%	45.7%	11.2%	15.4%	95.4%	9.9%	2.9%
<b>Benchmark</b>	-22.1%	28.7%	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%

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Underlying Strategies	Weight
1. Innov. ARK DD	25.0%
2. Innov. Internet DD	25.0%
3. Innov. Robo-AI DD	25.0%
4. Innov. Bio-Genome DD	25.0%



YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
-0.9%	4.1%	6.9%	21.0%	22.6%	21.8%
20.8%	13.9%	9.8%	12.5%	11.8%	9.7%

Methodology			Portfolio Construction	
Tactical Momentum Strategies. Each of the four underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.			The Innovation ETF selections are made from a field of 33 ARK, internet, robotics, AI, and bio-genome ETFs. The underlying strategies employ a momentum backstop having defensive funds that compete for momentum leadership with the 33 green ETFs. The Strategy includes a defensive integrated Bear Market Strategy, triggered by StormGuard.	
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Growth	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name
1	BSX	9.1 Boston Scientific	9	ADBE	9.1 Adobe
2	WMT	9.1 Walmart Inc	10	PCG	9.1 PG&E
3	BKNG	9.1 Booking Holdings	11	SCCO	9.1 Southern Copper
4	MUFG	9.1 Mitsubishi UFJ Financial			
5	NOC	9.1 Northrop Grumman			
6	MPC	9.1 Marathon Petroleum Corp			
7	META	9.1 Meta Platforms Inc			
8	DLR	9.1 Digital Realty Trust			

## Alpha Stocks DD Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 07-20-2003** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: -G,W,X** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: S&P500** The S&P500 U.S. stock market index.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>29.4</b>	<b>35.4%</b>	<b>23%</b>
<b>Benchmark</b>	<b>75.9</b>	<b>9.7%</b>	<b>55%</b>

Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

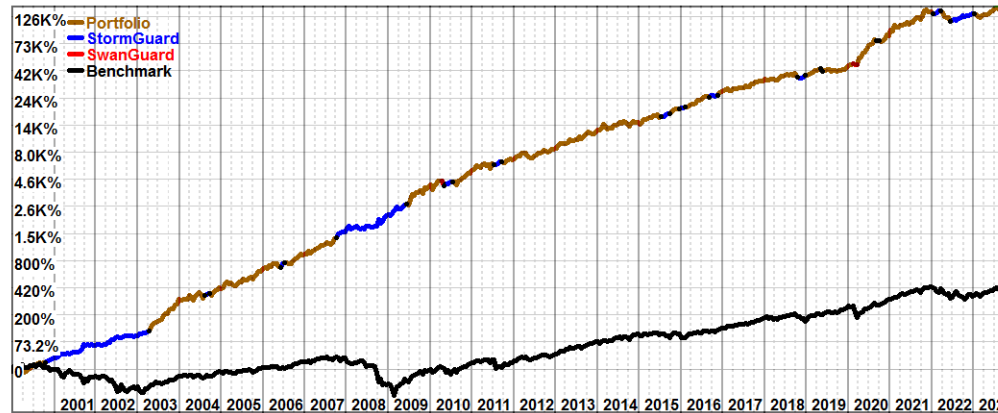
**RISK**  
29

Riskalyze

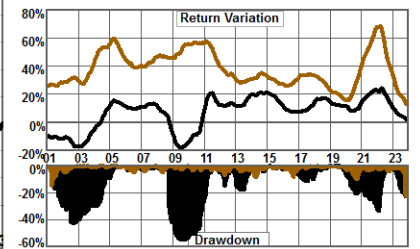


**CAGR**  
35

Percent



Strategy	Wt.	Strategy	Wt.
Stocks: Healthcare	9.1%	Stocks: Cons. Staples	9.1%
Stocks: Cons. Discretionary	9.1%	Stocks: Finance	9.1%
Stocks: Industrial	9.1%	Stocks: Energy	9.1%
Stocks: Communications	9.1%	Stocks: Real Estate	9.1%
Stocks: Technology	9.1%	Stocks: Utilities	9.1%
Stocks: Materials	9.1%		



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	22.9%	96.1%	34.1%	38.8%	39.8%	60.4%	39.0%	77.2%	32.0%	31.0%	25.1%	41.4%	19.8%	32.7%	39.4%	24.7%	12.9%	17.8%	93.6%	57.7%	-2.0%
<b>Benchmark</b>	-22.1%	28.7%	10.9%	4.9%	15.8%	5.5%	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%	28.7%	-18.1%

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Methodology			Portfolio Construction	
Tactical Momentum Strategies. Each of the 11 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.			The Stocks selections are made from a field of 121 of the largest cap stocks in each of the 11 economic sectors. The underlying strategies employ a momentum backstop having defensive funds that compete for momentum leadership with the 121 Stocks. The Strategy includes a defensive integrated Bear Market Strategy, triggered by StormGuard.	
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Growth	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

## Model Rebalanced: Dec-01-2023

## Status: **BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name		
1	SPSB	20.0	SPDR Portfolio Short-Term Corp Bd ETF	9	QQQ	2.5	Invesco QQQ ETF
2	GLD	20.0	SPDR Gold ETF	10	ONEQ	2.5	Fidelity NASDAQ Composite Index ETF
3	FALN	17.5	iShares Fallen Angels USD Bond ETF	11	VONG	2.5	Vanguard Russell 1000 Growth ETF
4	VGSH	17.5	Vanguard Short-Term Treasury ETF	12	IWY	2.5	iShares Russell Top 200 Growth ETF
5	DBC	5.0	Invesco DB Commodity Index Tracking ETF				
6	COMT	5.0	iShares GSCI Comdity Dync Roll Strat ET				
7	GSG	2.5	iShares S&P GSCI Commodity Indexed ETF				
8	UUP	2.5	Invesco DB US Dollar Index Bullish				

## Alpha 20:80 DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 05-07-2011 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** -B,Y,W,A,O,J Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B2080 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>24.6</b>	<b>10.2%</b>	<b>9%</b>
<b>Benchmark</b>	<b>25.7</b>	<b>4.0%</b>	<b>14%</b>

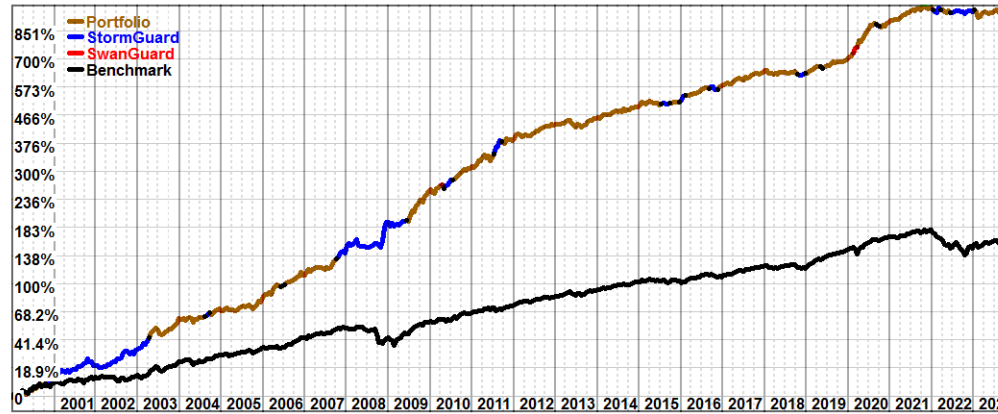
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

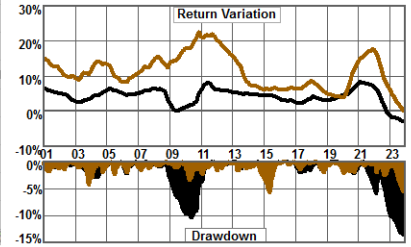
**RISK**  
25  
Riskalyze



**CAGR**  
10  
Percent



Strategy	Wt.	Strategy	Wt.
Bonds SPDR	20%	Gold'n Yield	20%
Bonds iShares	17.5%	Treasuries	17.5%
Tactical Risk Mitigation-1	5.0%	Tactical Risk Mitigation-2	5.0%
Tactical Risk Mitigation-3	2.5%	Tactical Risk Mitigation-4	2.5%
Stylebox SPDR DD	2.5%	Stylebox iShares DD	2.5%
Stylebox Vanguard DD	2.5%	Stylebox Russell DD	2.5%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	11.6%	17.4%	8.4%	5.6%	17.3%	15.8%	19.2%	19.9%	17.1%	17.1%	10.1%	4.7%	7.2%	2.8%	10.3%	9.2%	-0.7%	8.4%	26.9%	9.3%	-2.8%
<b>Benchmark</b>	1.0%	8.5%	5.2%	3.6%	7.0%	6.8%	-5.6%	8.9%	6.6%	4.3%	5.6%	4.3%	5.0%	0.6%	3.0%	6.5%	-0.9%	11.3%	9.1%	3.6%	10.9%

YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
0.6%	0.2%	3.3%	8.2%	6.9%	10.2%
5.8%	4.3%	-0.5%	3.4%	3.2%	4.0%

Methodology		Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
Investor Risk Profile		Scheduled	Unscheduled		
Fixed Income	Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

[More Charts](#)

## Model Rebalanced: Dec-01-2023

## Status: BULL Market

Sym	%	Fund Name	Sym	%	Fund Name
1	SPSB 12.5	SPDR Portfolio Short-Term Corp Bd ETF	9	QQQ 12.5	Invesco QQQ ETF
2	GLD 12.5	SPDR Gold ETF	10	ONEQ 6.3	Fidelity NASDAQ Composite Index ETF
3	FALN 12.5	iShares Fallen Angels USD Bond ETF	11	XLE 6.3	Energy Select Sector SPDR ETF
4	VGSH 12.5	Vanguard Short-Term Treasury ETF			
5	DBC 6.3	Invesco DB Commodity Index Tracking ETF			
6	COMT 6.3	iShares GSCI Comdity Dync Roll Strat ET			
7	GSG 6.3	iShares S&P GSCI Commodity Indexed ETF			
8	UUP 6.3	Invesco DB US Dollar Index Bullish			

## Alpha 40:60 DD Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 05-07-2011** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: -B,Y,W,A,O,J** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: B4060** Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>23.5</b>	<b>12.7%</b>	<b>9%</b>
<b>Benchmark</b>	<b>36.6</b>	<b>5.4%</b>	<b>24%</b>

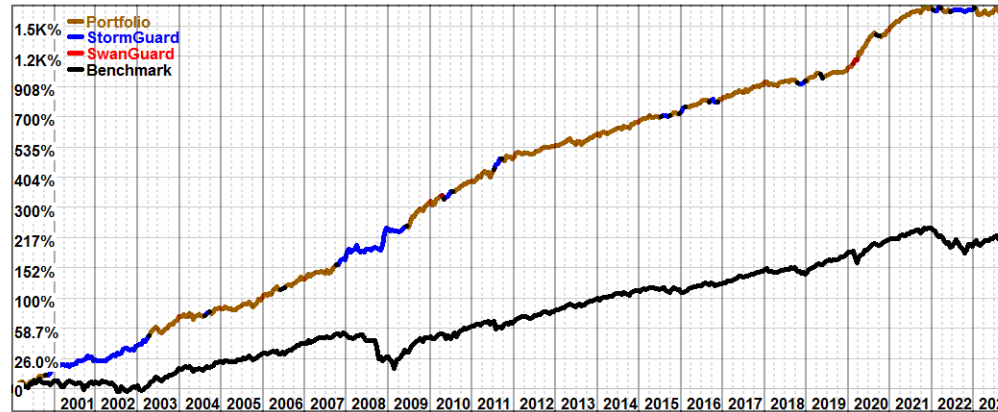
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

**RISK**  
24  
Riskalyze

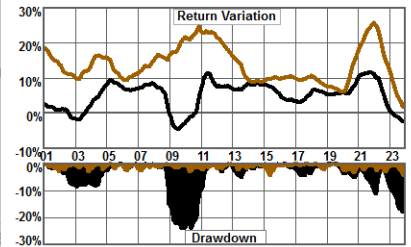


**CAGR**  
13  
Percent



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Portfolio</b>	13.0%	21.4%	9.4%	6.2%	17.4%	17.8%	24.9%	20.3%	19.2%	18.1%	9.8%	9.3%	10.3%	7.1%	11.4%	11.7%	2.5%	8.7%	36.6%	17.5%	-1.2%	
<b>Benchmark</b>	-3.8%	14.4%	7.2%	4.7%	9.5%	7.2%	-14.8%	13.8%	8.9%	3.4%	8.6%	10.3%	6.2%	1.0%	4.3%	10.5%	-2.4%	16.3%	12.7%	8.5%	-13.5%	

Strategy	Wt.	Strategy	Wt.
Bonds SPDR	12.5%	Gold'n Yield	12.5%
Bonds iShares	12.5%	Treasuries	12.5%
Tactical Risk Mitigation-1	6.3%	Tactical Risk Mitigation-2	6.3%
Tactical Risk Mitigation-3	6.3%	Tactical Risk Mitigation-4	6.3%
Stylebox SPDR DD	6.3%	Stylebox iShares DD	6.3%
Sectors SPDR-9 DD	6.3%	Sectors SPDR Gold DD	6.3%



YTD	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
-0.6%	-0.8%	6.2%	11.8%	10.1%	12.6%
8.7%	6.1%	1.3%	5.5%	5.0%	5.4%

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Methodology		Portfolio Construction		
Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.		The 40:60 Portfolio is a blended set of portfolios including: 50% Alpha Bonds, 25% Alpha Risk Mitigation, 12.5% Alpha Stylebox, and 12.5% Alpha Sectors. The Portfolio will never allocate more than 40% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 40%.		
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Conservative	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.



# Alpha 60:40 Core DD

Dual Defense™ Portfolio

November 30, 2023

Model Rebalanced: Dec-01-2023

Status: **BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name		
1	SPSB	8.0	SPDR Portfolio Short-Term Corp Bd ETF	9	QQQ	12.0	Invesco QQQ ETF
2	GLD	8.0	SPDR Gold ETF	10	ONEQ	12.0	Fidelity NASDAQ Composite Index ETF
3	FALN	8.0	iShares Fallen Angels USD Bond ETF	11	VONG	12.0	Vanguard Russell 1000 Growth ETF
4	VGSH	8.0	Vanguard Short-Term Treasury ETF	12	IWY	12.0	iShares Russell Top 200 Growth ETF
5	DBC	4.0	Invesco DB Commodity Index Tracking ETF				
6	COMT	4.0	iShares GSCI Comdity Dync Roll Strat ET				
7	GSG	6.0	iShares S&P GSCI Commodity Indexed ETF				
8	UUP	6.0	Invesco DB US Dollar Index Bullish				

## Alpha 60:40 Core DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 05-07-2011 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** -B,Y,W,A,O,J Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B6040 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>26.4</b>	<b>14.0%</b>	<b>10%</b>
<b>Benchmark</b>	<b>49.5</b>	<b>6.7%</b>	<b>36%</b>

Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

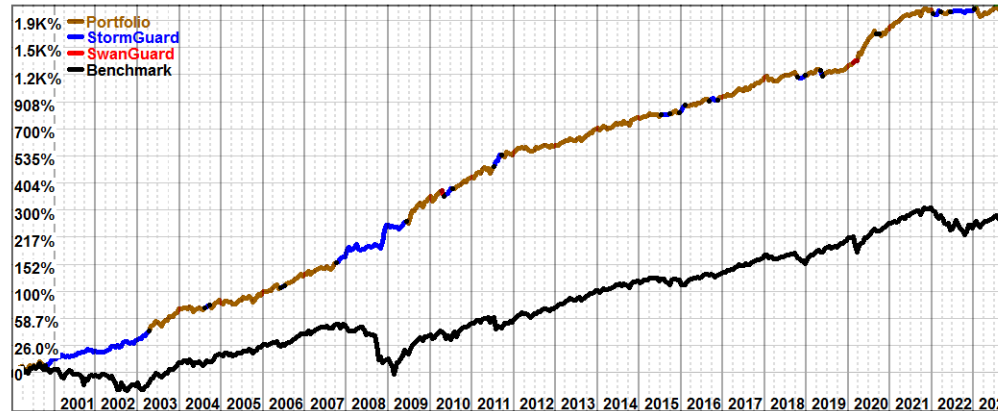
**RISK**  
26

Riskalyze

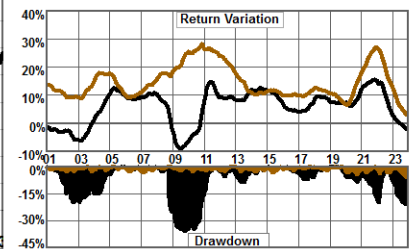


**CAGR**  
14

Percent



Strategy	Wt.	Strategy	Wt.
Bonds SPDR	8.0%	Gold'n Yield	8.0%
Bonds iShares	8.0%	Treasuries	8.0%
Tactical Risk Mitigation-1	4.0%	Tactical Risk Mitigation-2	4.0%
Tactical Risk Mitigation-3	6.0%	Tactical Risk Mitigation-4	6.0%
Stylebox SPDR DD	12.0%	Stylebox iShares DD	12.0%
Stylebox Vanguard DD	12.0%	Stylebox Russell DD	12.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	12.4%	26.3%	9.6%	4.4%	18.4%	19.2%	29.1%	24.6%	20.1%	21.5%	7.4%	16.5%	8.6%	5.7%	12.9%	16.8%	3.9%	7.1%	39.5%	17.0%	-0.5%
<b>Benchmark</b>	-8.6%	20.3%	9.3%	5.7%	12.1%	7.6%	-23.3%	18.7%	11.1%	2.3%	11.6%	16.6%	7.5%	1.3%	5.6%	14.7%	-4.0%	21.5%	15.7%	13.6%	-16.2%

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## Methodology

Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

## Portfolio Construction

[More Charts](#)

The 60:40 Core Portfolio is a blended combination of other portfolios including: 32% Alpha Bonds, 20% Alpha Risk Mitigation, and 48% Alpha Stylebox. The Portfolio will never allocate more than 60% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 60%.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Conservative	Month-End	Exit market quickly for a Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

See Legal-Disclaimer page for technical terms, historical data, and service limits information. Performance updated daily.

### Model Rebalanced: Dec-01-2023

### Status: **BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name		
1	SPSB	8.0	SPDR Portfolio Short-Term Corp Bd ETF	9	XLE	12.0	Energy Select Sector SPDR ETF
2	GLD	8.0	SPDR Gold ETF	10	QQQ	12.0	Invesco QQQ ETF
3	FALN	8.0	iShares Fallen Angels USD Bond ETF	11	IYW	12.0	iShares US Technology ETF
4	VGSH	8.0	Vanguard Short-Term Treasury ETF	12	VDE	12.0	Vanguard Energy ETF
5	DBC	4.0	Invesco DB Commodity Index Tracking ETF				
6	COMT	4.0	iShares GSCI Comdity Dync Roll Strat ET				
7	GSG	6.0	iShares S&P GSCI Commodity Indexed ETF				
8	UUP	6.0	Invesco DB US Dollar Index Bullish				

### Alpha 60:40 Sectors DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 05-07-2011 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** -B,Y,W,A,O,J Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B6040 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>25.3</b>	<b>17.1%</b>	<b>12%</b>
<b>Benchmark</b>	<b>49.5</b>	<b>6.7%</b>	<b>36%</b>

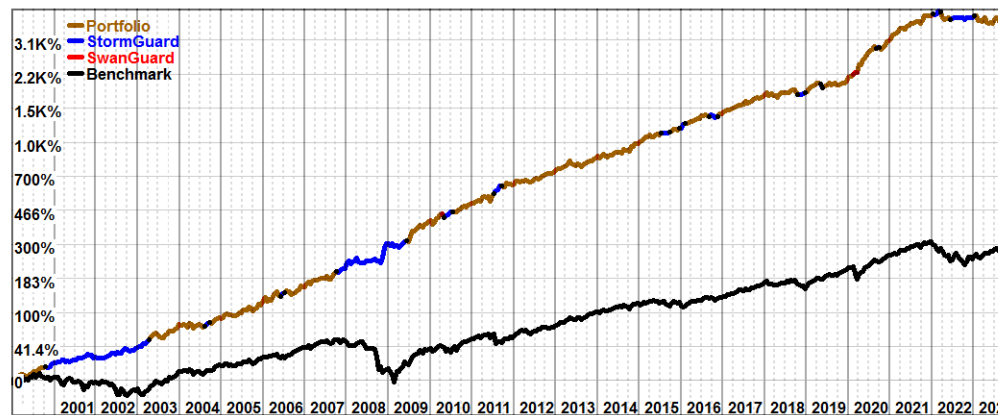
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

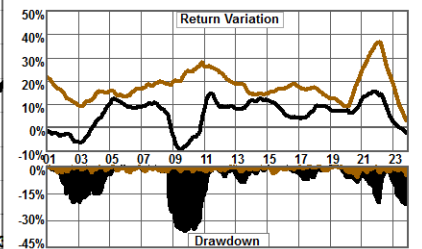
**RISK**  
25  
Riskalyze



**CAGR**  
17  
Percent



Strategy	Wt.	Strategy	Wt.
Bonds SPDR	8.0%	Gold'n Yield	8.0%
Bonds iShares	8.0%	Treasuries	8.0%
Tactical Risk Mitigation-1	4.0%	Tactical Risk Mitigation-2	4.0%
Tactical Risk Mitigation-3	6.0%	Tactical Risk Mitigation-4	6.0%
Sectors SPDR-9 DD	12.0%	Sectors SPDR Gold DD	12.0%
Sectors iShares DD	12.0%	Sectors Aggressive DD	12.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	12.2%	21.7%	10.6%	13.7%	20.5%	21.8%	27.5%	24.4%	20.4%	19.5%	14.7%	16.1%	14.7%	17.1%	15.8%	19.6%	4.1%	12.5%	50.4%	28.8%	-1.5%
<b>Benchmark</b>	-8.6%	20.3%	9.3%	5.7%	12.1%	7.6%	-23.3%	18.7%	11.1%	2.3%	11.6%	16.6%	7.5%	1.3%	5.6%	14.7%	-4.0%	21.5%	15.7%	13.6%	-16.2%

Hypothetical portfolio model performance assumes trade signals provided are executed at the close of the subsequent market day. Past performance does not guarantee future performance. Copyright 2023 SumGrowth Strategies, LLC all rights reserved.

Methodology			Portfolio Construction	
<p>Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.</p>			<p>The 60:40 Sectors Portfolio is a blended combination of other portfolios including: 32% Alpha Bonds, 20% Alpha Risk Mitigation, and 48% Alpha Sectors. The Portfolio will never allocate more than 60% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 60%.</p>	
Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Moderate	Month-End	<p>Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.</p>	<p>StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.</p>	<p>Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.</p>

### Model Rebalanced: Dec-01-2023

### Status: **BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name
1	FALN 15.0	iShares Fallen Angels USD Bond ETF	9	IOO 2.5	iShares Global 100 ETF
2	VGSH 15.0	Vanguard Short-Term Treasury ETF	10	EDIV 5.0	SPDR S&P Emerging Markets Dividend ETF
3	DBC 12.5	Invesco DB Commodity Index Tracking ETF	11	FILL 5.0	iShares MSCI Global Energy Producers ET
4	COMT 12.5	iShares GSCI Comdity Dync Roll Strat ET			
5	QQQ 10.0	Invesco QQQ ETF			
6	ONEQ 7.5	Fidelity NASDAQ Composite Index ETF			
7	VONG 7.5	Vanguard Russell 1000 Growth ETF			
8	IWY 7.5	iShares Russell Top 200 Growth ETF			

### Alpha 60:40 Global DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 10-01-2007 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** -B,W,A,J,Y Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B6040 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>25.3</b>	<b>13.4%</b>	<b>10%</b>
<b>Benchmark</b>	<b>49.5</b>	<b>6.7%</b>	<b>36%</b>

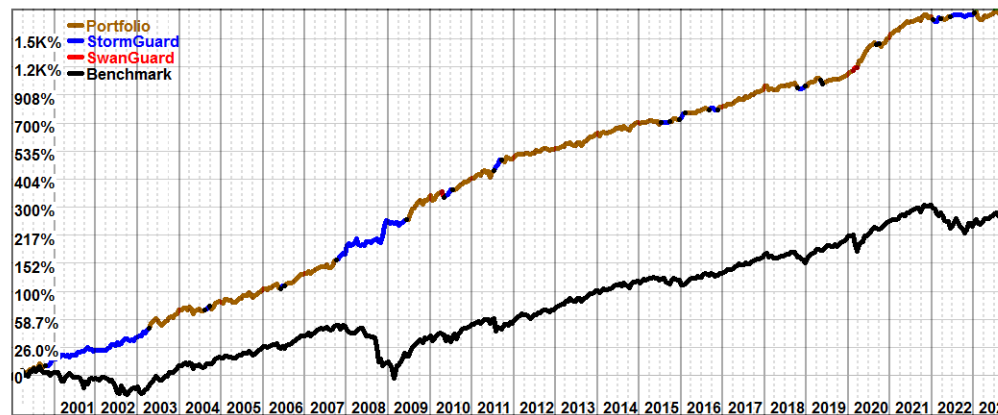
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

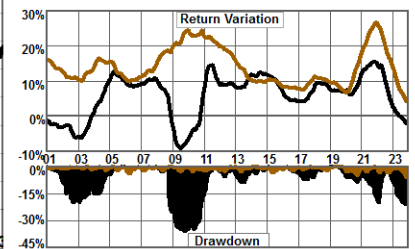
**RISK**  
25  
Riskalyze



**CAGR**  
13  
Percent



Strategy	Wt.	Strategy	Wt.
Bonds iShares	15.0%	Treasuries	15.0%
Tactical Risk Mitigation-1	12.5%	Tactical Risk Mitigation-2	12.5%
Stylebox SPDR DD	7.5%	Stylebox iShares DD	7.5%
Stylebox Vanguard DD	7.5%	Stylebox Russell DD	7.5%
Global Regions iSh DD	2.5%	Global Countries DD	2.5%
Global Regions SPDR DD	5.0%	Global Sectors DD	5.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	13.5%	21.2%	10.1%	7.2%	15.8%	21.1%	28.5%	20.1%	17.0%	19.0%	7.5%	13.8%	8.4%	3.5%	10.3%	16.3%	2.6%	9.5%	37.1%	17.5%	1.9%
<b>Benchmark</b>	-8.6%	20.3%	9.3%	5.7%	12.1%	7.6%	-23.3%	18.7%	11.1%	2.3%	11.6%	16.6%	7.5%	1.3%	5.6%	14.7%	-4.0%	21.5%	15.7%	13.6%	-16.2%

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### Methodology

Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

### Portfolio Construction

[More Charts](#)

The 60:40 Global Portfolio is a blended combination of other portfolios including: 32% Alpha Bonds, 20% Alpha Risk Mitigation, and 48% Alpha Global. The Portfolio will never allocate more than 60% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 60%.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Moderate	Month-End	Exit market quickly for a Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.



# Alpha 60:40 Green DD

Dual Defense™ Portfolio

November 30, 2023

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name
1	FALN 15.0	iShares Fallen Angels USD Bond ETF	9	ESGY 2.5	American Century Sustainable Growth ETF
2	VGSH 15.0	Vanguard Short-Term Treasury ETF	10	PHO 2.5	Invesco Water Resources ETF
3	DBC 15.0	Invesco DB Commodity Index Tracking ETF	11	GSG 2.5	iShares S&P GSCI Commodity Indexed ETF
4	COMT 15.0	iShares GSCI Comdity Dync Roll Strat ET	12	UUP 2.5	Invesco DB US Dollar Index Bullish
5	QQQ 7.5	Invesco QQQ ETF			
6	ONEQ 7.5	Fidelity NASDAQ Composite Index ETF			
7	XLE 7.5	Energy Select Sector SPDR ETF			
8	IYW 7.5	iShares US Technology ETF			

## Alpha 60:40 Green DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 10-01-2007 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** -B,W,A,J,O,Z Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B6040 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>26.4</b>	<b>13.6%</b>	<b>10%</b>
<b>Benchmark</b>	<b>49.5</b>	<b>6.7%</b>	<b>36%</b>

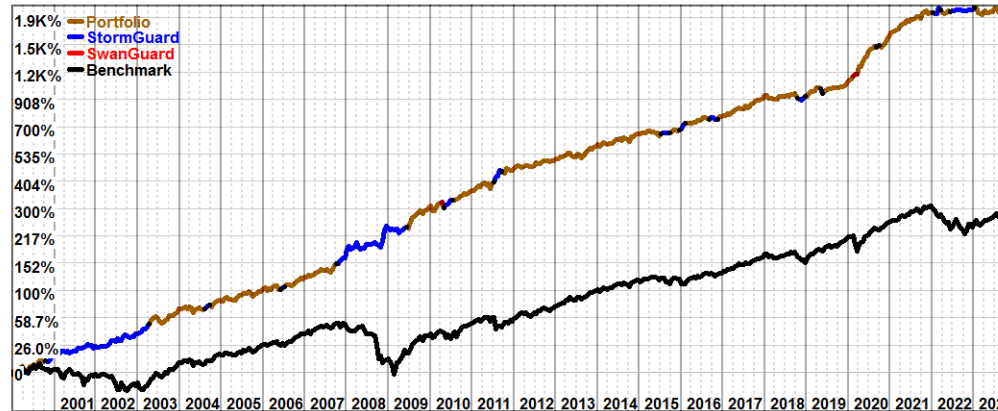
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

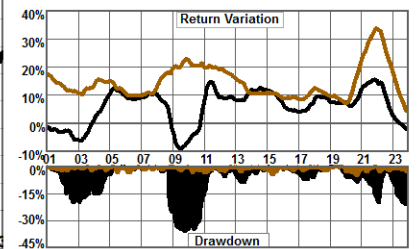
**RISK**  
26  
Riskalyze



**CAGR**  
14  
Percent



Strategy	Wt.	Strategy	Wt.
Bonds iShares	15.0%	Treasuries	15.0%
Tactical Risk Mitigation-1	12.5%	Tactical Risk Mitigation-2	12.5%
Stylebox SPDR DD	7.5%	Stylebox iShares DD	7.5%
Sectors SPDR-9 DD	7.5%	Sectors iShares DD	7.5%
Sustainable Future DD	2.5%	Clean Water DD	2.5%
Clean Energy DD	5.0%	Electric Vehicles DD	5.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	13.9%	19.1%	10.4%	6.7%	12.1%	21.7%	27.5%	16.6%	16.0%	20.2%	7.8%	13.5%	9.7%	4.0%	11.3%	17.6%	1.4%	11.3%	50.3%	21.3%	2.4%
<b>Benchmark</b>	-8.6%	20.3%	9.3%	5.7%	12.1%	7.6%	-23.3%	18.7%	11.1%	2.3%	11.6%	16.6%	7.5%	1.3%	5.6%	14.7%	-4.0%	21.5%	15.7%	13.6%	-16.2%

Hypothetical portfolio model performance assumes trade signals provided are executed at the close of the subsequent market day. Past performance does not guarantee future performance. Copyright 2023 SumGrowth Strategies, LLC all rights reserved.

## Methodology

Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

## Portfolio Construction

[More Charts](#)

The 60:40 Green Portfolio is a blended combination of other portfolios including: 32% Alpha Bonds, 20% Alpha Risk Mitigation, and 48% Alpha Green. The Portfolio will never allocate more than 60% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 60%.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Moderate	Month-End	Exit market quickly for a Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

See Legal-Disclaimer page for technical terms, historical data, and service limits information. Performance updated daily.

**Model Rebalanced: Dec-01-2023**

**Status: BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name
1	GLD	20.0 SPDR Gold ETF	9	META	5.0 Meta Platforms Inc
2	VGSH	20.0 Vanguard Short-Term Treasury ETF	10	DLR	5.0 Digital Realty Trust
3	BSX	7.5 Boston Scientific	11	ADBE	7.5 Adobe
4	WMT	5.0 Walmart Inc	12	SCCO	5.0 Southern Copper
5	BKNG	7.5 Booking Holdings			
6	MUFG	5.0 Mitsubishi UFJ Financial			
7	NOC	5.0 Northrop Grumman			
8	MPC	7.5 Marathon Petroleum Corp			

### Alpha 60:40 Stocks DD Portfolio

- ▶ **Portfolio Inception Date: 12-25-2022** When the portfolio design was completed and available.
- ▶ **Forward Walk Starting: 04-16-2006** Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy: -Y,G,W,X** Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index: B6040** Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	24.3	26.0%	17%
<b>Benchmark</b>	49.5	6.7%	36%

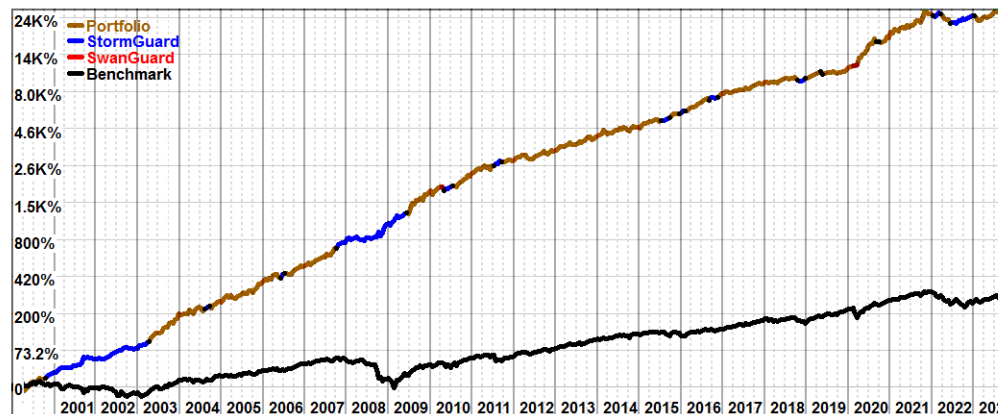
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

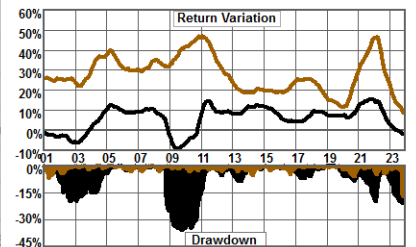
**RISK**  
**24**  
Riskalyze



**CAGR**  
**26**  
Percent



Strategy	Wt.	Strategy	Wt.
Gold'n Yield	20%	Treasuries	20%
Stocks: Healthcare	7.5%	Stocks: Cons. Staples	5.0%
Stocks: Cons. Discretionary	7.5%	Stocks: Finance	5.0%
Stocks: Industrial	5.0%	Stocks: Energy	7.5%
Stocks: Communications	5.0%	Stocks: Real Estate	5.0%
Stocks: Technology	7.5%	Stocks: Materials	5.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<b>Portfolio</b>	19.5%	57.7%	26.2%	28.6%	30.2%	43.2%	31.2%	58.1%	28.8%	23.7%	16.9%	22.7%	15.7%	22.8%	32.3%	17.4%	8.6%	14.1%	62.3%	40.9%	-2.8%	
<b>Benchmark</b>	-8.6%	20.3%	9.3%	5.7%	12.1%	7.6%	-23.3%	18.7%	11.1%	2.3%	11.6%	16.6%	7.5%	1.3%	5.6%	14.7%	-4.0%	21.5%	15.7%	13.6%	-16.2%	

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### Methodology

Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

### Portfolio Construction

[More Charts](#)

The 60:40 Stocks Portfolio is a blended combination of other portfolios including: 40% Alpha Bonds and 60% Alpha Stocks. The Portfolio will never allocate more than 60% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 60%.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Growth	Month-End	Exit market quickly for a Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.

## Model Rebalanced: Dec-01-2023

## Status: **BULL Market**

Sym	%	Fund Name	Sym	%	Fund Name		
1	SPSB	5.0	SPDR Portfolio Short-Term Corp Bd ETF	9	XLE	7.5	Energy Select Sector SPDR ETF
2	FALN	5.0	iShares Fallen Angels USD Bond ETF	10	IYW	10.0	iShares US Technology ETF
3	DBC	12.5	Invesco DB Commodity Index Tracking ETF	11	VDE	10.0	Vanguard Energy ETF
4	COMT	12.5	iShares GSCI Comdity Dync Roll Strat ET				
5	IOO	7.5	iShares Global 100 ETF				
6	QQQ	15.0	Invesco QQQ ETF				
7	EDIV	7.5	SPDR S&P Emerging Markets Dividend ETF				
8	FILL	7.5	iShares MSCI Global Energy Producers ET				

## Alpha 80:20 DD Portfolio

- ▶ **Portfolio Inception Date:** 12-25-2022 When the portfolio design was completed and available.
- ▶ **Forward Walk Starting:** 08-13-2008 Backtesting ends. Walk through out-of-sample data begins.
- ▶ **Bear Market Strategy:** -B,W,A,Y,J,O Invoked by StormGuard-Armor. Selects only defensive funds.
- ▶ **Benchmark Index:** B8020 Based on industry consensus asset allocation mix. See portfolio notes.

### Hypothetical Performance

	RISK	CAGR	MaxDD
<b>Portfolio</b>	<b>26.5</b>	<b>19.0%</b>	<b>12%</b>
<b>Benchmark</b>	<b>63.6</b>	<b>7.9%</b>	<b>47%</b>

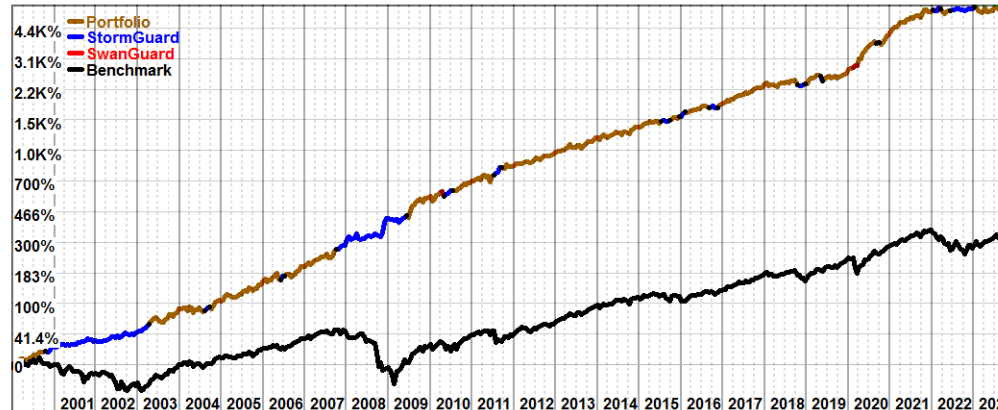
Statistics measured from 6/1/2004 by AlphaDroid.

Nov 30, 2023

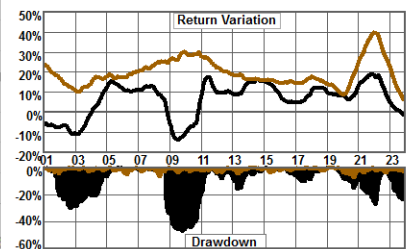
**RISK**  
27  
Riskalyze



**CAGR**  
19  
Percent



Strategy	Wt.	Strategy	Wt.
Bonds SPDR	5.0%	Bonds iShares	5.0%
Tactical Risk Mitigation-1	12.5%	Tactical Risk Mitigation-2	12.5%
Global Regions iSh DD	7.5%	Global Countries DD	7.5%
Global Regions SPDR DD	7.5%	Global Sectors DD	7.5%
Sectors SPDR-9 DD	7.5%	Sectors SPDR Gold DD	7.5%
Sectors iShares DD	10.0%	Sectors Aggressive DD	10.0%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
<b>Portfolio</b>	12.4%	25.3%	14.0%	17.7%	24.2%	29.1%	32.9%	26.7%	19.6%	18.6%	15.2%	20.2%	12.1%	12.6%	14.6%	23.4%	2.8%	13.4%	54.0%	29.9%	2.9%
<b>Benchmark</b>	-13.7%	26.2%	11.2%	6.7%	14.7%	7.9%	-31.4%	23.4%	12.7%	0.4%	14.3%	23.3%	8.5%	1.6%	6.8%	18.8%	-5.6%	26.4%	17.6%	18.9%	-18.2%

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## Methodology

Tactical Momentum Strategies. Each of the 12 underlying strategies uses a rules-based tactical momentum algorithm to evaluate a set of candidate ETFs at each month-end, wherein the trend leader of each is selected to be a member of the model's Portfolio for the subsequent month. In Bear markets candidates are defensive ETFs vs equity ETFs.

## Portfolio Construction

[More Charts](#)

The 80:20 Portfolio is a blended set of portfolios including: 10% Alpha Bonds, 25% Alpha Risk Mitigation, 30% Alpha Global, and 35% Alpha Sectors. The Portfolio will never allocate more than 80% of its assets to equities. However, both Dual Defense components employ bonds and commodities that at times reduces equities well under 80%.

Investor Risk Profile	Rebalance Activity		Dual Defense Strategy	About Momentum Trading Expectations
	Scheduled	Unscheduled		
Growth	Month-End	Exit market quickly for a for Black Swan event. Get back into equities early for a particularly sharp market rebound.	StormGuard reviews 16 market health measures to determine Bull/Bear. A momentum backstop is also directly employed.	Economic, bureaucratic, and social responses to inflation, politics, and pandemics can disrupt momentum in otherwise orderly markets that is required for profitable trading.



## Essential Videos

### Overview



[The Alpha Sheet Online](#)

### Dual Defense



[Dual Defense Online](#)

### Model Blender



[AlphaDroid Wealth Mgr.](#)

### Detailed Buy List



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### Retirement Funds



[Download XLSX Example](#)



## Deeper Dives

### Bull or Bear?



[Risk: Alpha Daily Brief](#)

### Momentum Leaders



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### AlphaDroid Platform



[AlphaDroid Quant](#)

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