



Sector Rotation and Risk Management
Houston AAI Chapter Sat. Nov. 19, 2022



Sector Rotation and Risk Management

Houston AAll Chapter Sat. Nov. 19, 2022



Scott Juds

President & CEO SumGrowth Strategies
Chairman & CEO Merlyn.AI Corporation

Disclaimers

- **Neither SumGrowth Strategies nor I are registered investment advisors or broker-dealers.**
- **This presentation is for educational purposes only and is not an offer to buy or sell securities.**
- **This information is general in nature and should not be construed as personal investment advice as it is not provided in view of the circumstances of any particular individual.**
- **Investing in securities is speculative. You may lose some or all of the money invested.**
- **Past results of any particular trading system are not a guarantee of future performance.**



Sector Rotation and Risk Management

Houston AAll Chapter Sat. Nov. 19, 2022



Scott Juds

President & CEO SumGrowth Strategies
Chairman & CEO Merlyn.AI Corporation

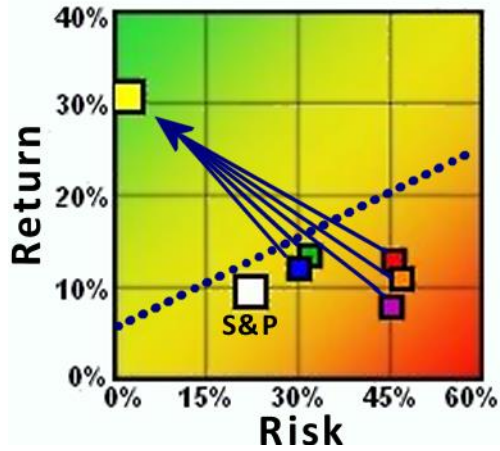
Part 1 – Practical Stuff

- Introducing Sector Surfer
- Markets – No Place to Hide
- SectorSurfer Online Practical Demo
- StormGuard & Bear Market Strategies
- The Tactical Risk Mitigation Index
- The Dual Defense Strategies
- Hall of Fame, Publications, Videos
- Newsletter, Subscriptions

Take a Break Here

Part 2 – Technical Stuff

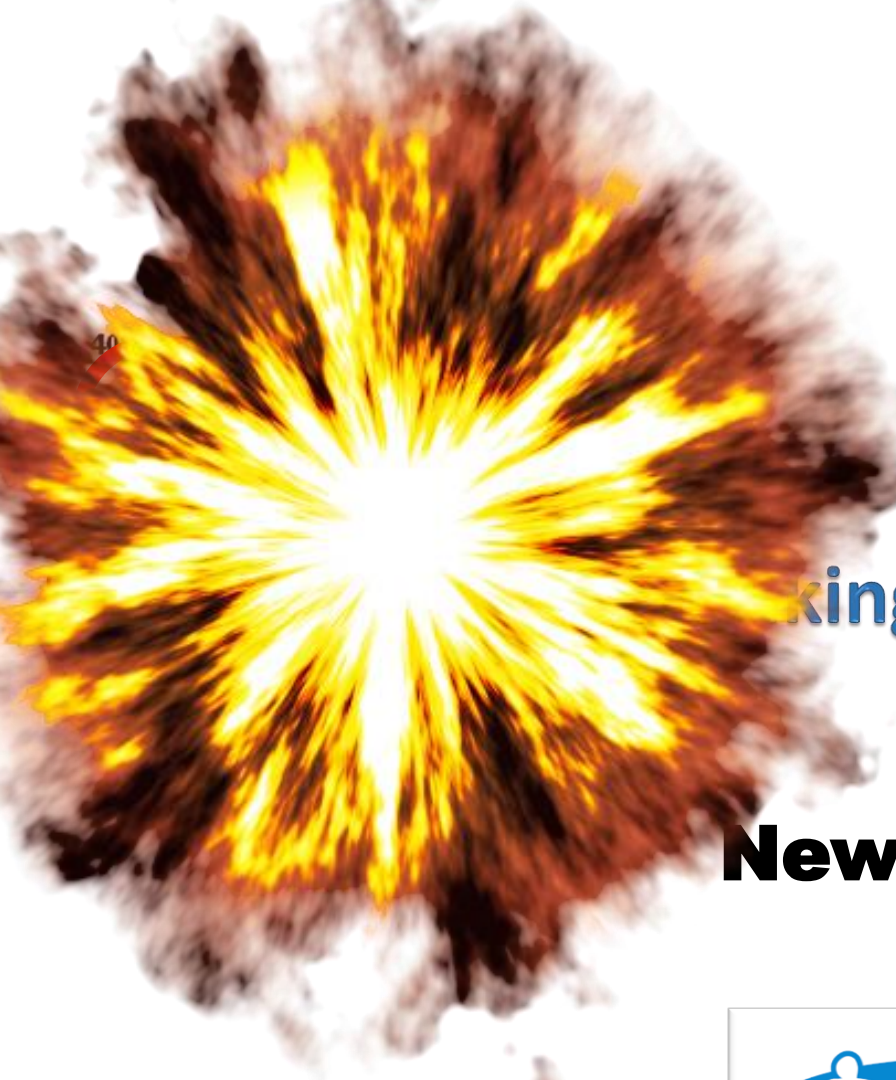
- MPT: Diversify & Rebalance
- Momentum Exists in Market Data
- Improving the Signal to Noise Ratio
- Bear Markets, StormGuard, SwanGuard
- Alpha Daily Brief Resources
- Hindsight Bias – Tuning and Selection
- Merlyn.AI's Genetic Algorithms
- Formal Indexes: What Lies Ahead?



Momentum

Breaking Through the Efficient Frontier





Momentum

Breaking Through the Efficient Frontier

New Tools Destroy Old Rules
Diversification:



Own a Bit of
Everything ...

... Produces Precisely
Average Performance.

Change the Game

My 1st Momentum Strategy

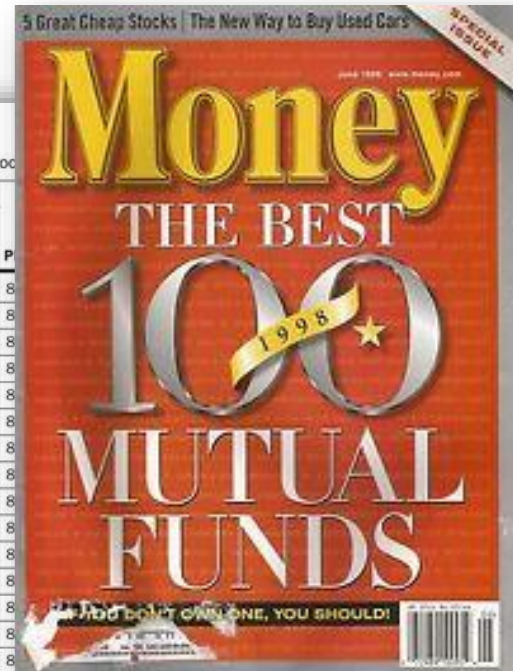
Late 1980s

The Best Fund Families of 1988

Successful funds like Delaware Management focused on stocks that could withstand shocks.

Rank	Family	Mutual Fund Assets (mil)	Weighted Score	FUND RANKING					P
				U.S. Equity	World Equity	Mixed Equity	Taxable Bond	Exempt Bond	
1.	Delaware Mgmt	\$25,503.7	75.03	2	4	27	7	35	8
2.	Vanguard Group	1,253,912.3	70.17	6	49	6	3	29	8
3.	Neuberger Berman Mgmt	24,427.3	69.31	7	13	2	33	7	8
4.	First Investors Mgmt	5,658.3	67.53	4	40	4	23	41	8
5.	State Farm Invst Mgmt	11,026.1	67.50	30	35	8	2	22	8
6.	State Street Bank & Trust	42,133.2	67.48	1	31	53	21	10	8
7.	MainStay Funds	40,092.4	67.26	17	9	18	6	14	8
8.	Charles Schwab Invst Mgmt	29,068.1	65.71	9	27	13	17	17	8
9.	American Century Invst Mgmt	80,068.9	64.85	20	23	10	11	24	8
10.	MFS Invst Mgmt	86,573.2	64.20	11	5	21	20	25	8
11.	Invesco	126,556.0	62.99	16	7	17	24	19	8
12.	Wells Fargo Fund Mgmt	79,642.2	62.55	24	28	14	8	40	8
13.	TIAA-CREF	43,648.2	62.44	13	42	29	9	1	8
14.	BlackRock	426,254.5	62.20	10	26	22	19	26	8
15.	Northern Trust	25,945.0	61.70	26	43	1	26	18	8
16.	Virtus Investment Partners	12,874.8	61.64	14	1	19	42	12	8
17.	SEI Group	22,104.3	60.72	15	16	26	18	46	8
18.	GE Asset Mgmt	15,907.5	59.95	37	56	15	1	44	8
19.	Waddell & Reed Invst Mgmt	18,370.7	59.83	22	3	46	13	51	8
20.	USAA Invst Mgmt	34,086.8	58.72	29	11	28	27	3	8
21.	Eaton Vance Mgmt	56,895.3	58.69	47	6	20	12	9	8
22.	PIMCO/Allianz	474,936.7	57.29	8	12	7	52	54	8
23.	Columbia Mgmt	135,029.7	55.74	45	21	16	14	13	8
24.	Principal Mgmt	81,744.8	55.70	21	24	24	34	11	8
25.	Ivy Investment Mgmt	37,412.0	55.53	18	44	50	5	33	8
26.	HighMark Capital Mgmt	2,166.6	55.37	5	50	37	29	58	8
27.	PNC Funds	2,389.1	54.52	3	48	30	47	43	8
28.	UBS Global Asset Mgmt	9,631.3	54.44	39	10	41	25	8	8
29.	Fidelity Mgmt & Research	830,747.9	53.22	27	32	45	15	39	8

*No 800 phone number; available only through advisors.



FUND RANKING					Phone Number
World Equity	Mixed Equity	Taxable Bond	Exempt Bond	Tax-Exempt Bond	
15	11	57	6	800-342-5236	

OUR EXCLUSIVE RANKINGS OF 658 FUNDS

Money Guide

MUTUAL FUNDS

THIS YEAR'S BEST INVESTMENT!

- Smart ways to buy shares
- Pick top growth funds
- Find high-paying income funds
- Manage your portfolio like a pro

Plus: A savvy shopper's guide to the top 10 fund companies

BY THE EDITORS OF **Money**

45. Frost Investment Adv	2,451.2	42.66	32	38
46. John Hancock Group	930,92.7	42.27	49	20
47. Calvert Funds	90,57.3	41.80	40	47
48. DWS Investments	38,213.5	40.93	44	45
49. Goldman Sachs	54,113.7	40.77	43	39
50. Aberdeen Asset Mgmt	2,227.4	40.42	53	2
51. Pioneer Invst Mgmt	32,726.1	40.11	50	19
52. Hartford	48,935.4	36.68	58	41
53. Russell Investment	37,897.6	35.71	35	53
54. Nuveen Fund Adv	33,056.9	35.53	48	46
55. Thrivent Financial	13,092.5	35.20	56	17
56. Victory Capital Mgmt	6,891.3	31.56	51	34
57. Putnam Invst Mgmt	42,904.2	29.40	54	52
58. Manning & Napier Adv	15,799.4	29.36	57	55

My 1st Momentum Strategy

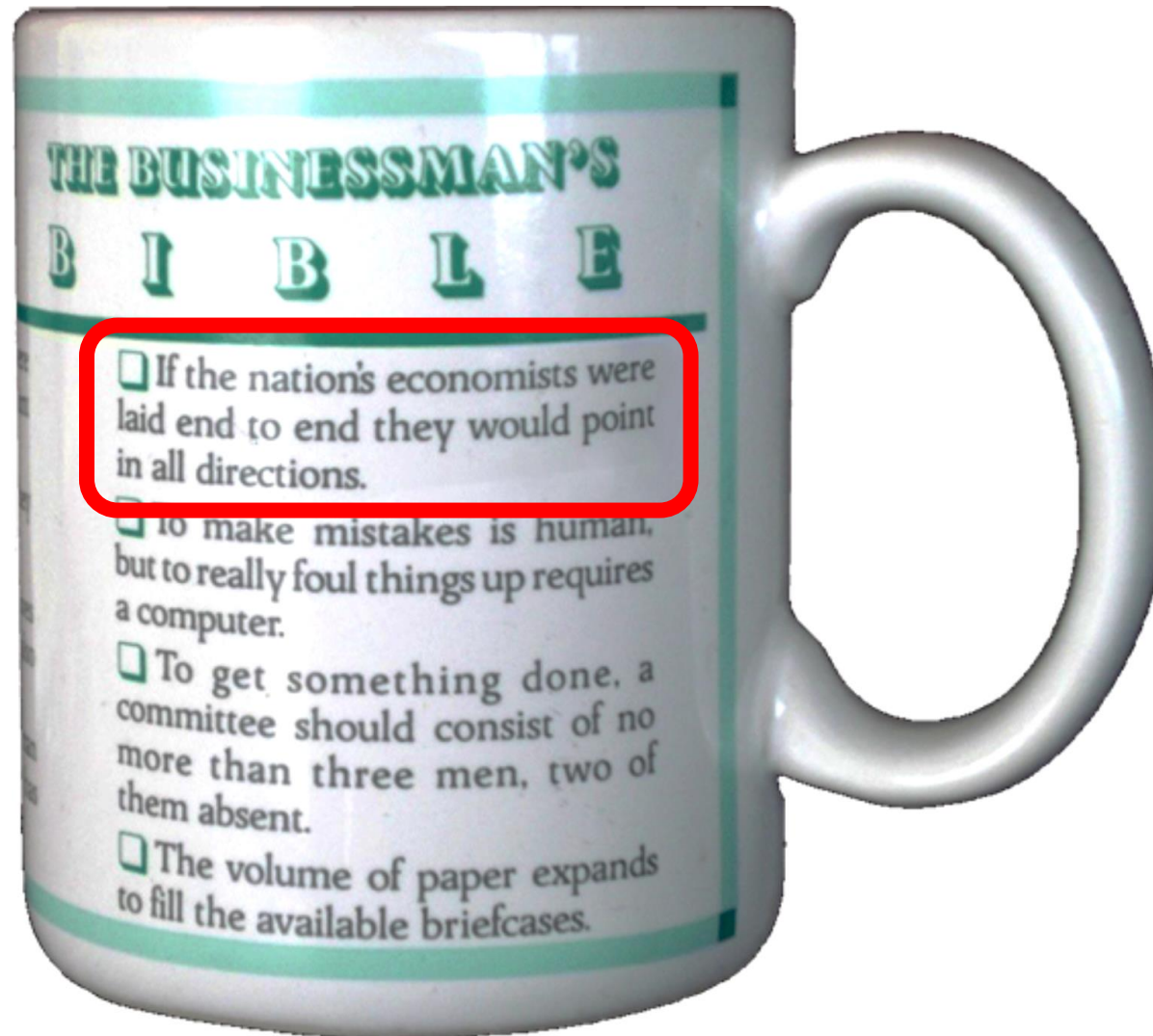
Late 1980s



Advice From Experts?



Advice From Experts?



Experts do Point in All Directions

Inherently a 50-50 Crap Shoot For Market Prediction



The Advice Problem



Mass Hypnotism

Goldman Sachs (GS) may face bad publicity, hostile congressmen, and campaigns by shareholders to cut compensation, but it remains a money making machine. The bank has disclosed that it had 131 trading days last year in which it made at least \$100 million in net trading revenue -- a new record for the bank. The data comes from the firm's 10-K and

What About the Data?

Does Recent Market Data
Hold Clues for Future Prices?

Do Price Trends Exist?

Fund Performance Per Quarter Month In 1989					
Fund Name	89 Jan-2	89 Jan-3	89 Jan-4	89 Feb-1	89 Feb-2
Blue Chip Growth	1.2	-0.7	5.6	1.1	-3.0
Contrafund	1.3	0.4	2.8	1.8	-1.2
Money Market	0.2	0.2	0.2	0.2	0.2
Emerging Growth	0.9	2.7	1.2	1.1	1.0
Europe	1.0	0.7	4.1	3.4	-2.3
Growth Company	1.0	0.1	0.7	0.2	-1.0
Cinne Mae	1.3	0.4	4.4	1.3	-2.2
Magellan	0.9	0.9	0.0	2.5	2.3
Overseas	0.0	0.2	1.6	-0.1	-1.0
Stock Selector	1.1	0.1	4.6	0.7	-2.6
Utilities Income					
S&P 500 Composite					

Selection Criteria Based on Trend Weighting					
	89 Jan-2	89 Jan-3	89 Jan-4	89 Feb-1	89 Feb-2
				-2.7	
				-1.3	
				-0.0	
				0.0	
				0.1	
				-1.8	

Fund Name	89 Jan-1	89 Jan-2	89 Jan-3
Blue Chip Growth			
Contrafund	6.5		
Money Market			
Emerging Growth			
Europe			
Growth Company			
Cinne Mae			
Magellan			
Overseas			
Stock Selector			
Utilities Income			
ProfiTaker	6.5		

Data Age	Weight	Percent	RESULTS		
1 Week	-5.0	-47%	Best Fund	36.9%	10.1%
2 Weeks	2.0	19%	Average Fund	19.8%	2.9%
3 Weeks	1.3	12%	S&P 500	25.1%	-3.2%
4 Weeks	-1.4	-13%	ProfiTaker	38.1%	35.5%
5-8 Weeks	1.0	9%	=====		
9-16 Week	0.0	-0%	PT Compound Est.	45.5%	41.9%
			3 Year Compounded		40.1%

1992 Spreadsheet Experiment:
Do Market Data Trends Exist?

Yes! Trends Exist.

Trend value

Fund selected

Coefficients

SectorSurfer Development

ProfiTaker for DOS – 1996



SumGrowth Strategies, LLC

Seattle WA

2010 Subscription Service – Individuals



The SectorSurfer website homepage features a navigation bar with links to Home, Example Strategies, Using SectorSurfer, Advanced Topics, Theory, Member Plans, Referral Program, and F.A.Q. The main header includes the SectorSurfer logo and the tagline "Sector Rotation Investment Strategies". Below this, a green banner highlights "True Sector Rotation Algorithms" with two bullet points: "Know when trends start and end" and "Own only the trend leader". A "Learn More" button is positioned at the bottom right of the banner. The page also includes a "Welcome!" section, a "SectorSurfer's Value Proposition" section, and a "1. Best Safety Performance" section. The "1. Best Safety Performance" section includes a "StormGuard Armor" section with a "SAFETY FIRST" icon and a "Bear Market Strategies" section. The "SectorSurfer's Value Proposition" section includes a "Merlyn.AI" logo and a "Bull-Rider Bear-Fighter" logo. The "1. Best Safety Performance" section includes a "StormGuard Armor" section with a "SAFETY FIRST" icon and a "Bear Market Strategies" section.

Welcome!

SectorSurfer levels the playing field with Wall Street by putting the power of *award winning* high performance investment algorithms in your hands. Its **True Sector Rotation** algorithm holds only the momentum leader during bull markets, and its **StormGuard** algorithm protects and grows your assets during bear markets. Only by owning the trend leader and avoiding the trend laggards can you simultaneously *improve returns* and *reduce risk*.

SectorSurfer's Value Proposition

We believe high performance investment software should be for everyone – not just Wall Street.

1. Best Safety Performance

StormGuard Armor™

- Never ride to the bottom of a market crash again!
- Outperforms all simple market direction indicators.
- Uses measures of price, momentum and sentiment.
- Incorporates PID Signal Processing and Fuzzy Logic.

Bear Market Strategies

- Exiting bear markets to cash is a thing of the past.
- Our Bear Market Symbol enables specifying a ticker symbol or a Bear Market Strategy instead of cash.

Video: Reducing Risk

S.G.-Armor Details

StormGuard Operation

Bear Market Strategies



The screenshot shows the SectorSurfer website interface with the "My Strategies" tab selected. The "Active Strategies" section lists 15 strategies, including VIX, Tech, Health and Energy, iShares Global Momentum, Fidelity Sectors, Market Magnifiers + Gold, Look Mom - No Hands!, Damn the Torpedoes, ETF Black Gold-II, ETF Power Bonds, Smooth Sailing Sectors, SPDR Man - Gold, ETF Smooth Coasting, ETF Smooth Coasting, and Monthly Dividend. The "Fidelity Sectors" strategy is highlighted, showing a detailed analysis of its performance and risk metrics.

SectorSurfer Strategy: Fidelity Sectors

Made: Feb-05-2022 5:32 pm
sjuds Strategy #4
Options: FWPT-SF, SG-Armor+ / BMS-W
Data: Investors FastTrack

Start: 09-01-1988
Cursor: 09-01-1988
End: 02-04-2022

Strategy: 33.4% /Yr
S&P 500: 11.3% /Yr

Stormguard Status: -2.4%

Fund Name | **Symbol** | **Trend**

Fund Name	Symbol	Trend
Fidelity Select Semiconductors	FSELX	Up
Fidelity Select Energy	FSENX	Up
Fidelity Select Consumer Finance	FVCLX	Up
Fidelity Select Computers	FDCPX	Up
Fidelity Select Leisure	FDLSX	Up
Fidelity Select Communication S	FBMPX	Up
Fidelity Real Estate	FRESX	Up
Fidelity Select Health Care Serv	FHCX	Up
Fidelity Select Health Care	FSPHX	Up
Fidelity Select Defense & Aero	FSDAX	Up
Fidelity Select Defense & Aero	FSDAX	Up
Fidelity Select Biotechnology	FBIOX	Up

Strategy | **S&P 500**

Score: 116.2 | Qtr. Wins: 80% | Sharpe Ratio: 1.25
Safety: 14.9 | Qtr. Beats: 70% | Sortino Ratio: 0.54
CAGR: 33.4% | B.O. Date: 01-02-04
R.Risk: 74% | Last Edit: 09-03-21
Trades: 4.4/yr | Trade: Automatic | 2.81

Statistics: 33.4 Years - Starting: 09-01-1988

Relative Probability

Return

Drawdown

Annualized Return

Quarterly Return

Relative Risk (S&P500=100%)

Annualized Returns

Strategy	Annualized Return
FSELX	17.2%
FSENX	7.83%
FVCLX	8.6%
FDCPX	11.1%
FDLSX	12.2%
FBMPX	12.1%
FRESX	10.6%
FHCX	13.8%
FSPHX	14.5%
FSDAX	12.1%
FSDAX	12.1%
FBIOX	13.6%

SumGrowth Strategies, LLC

Seattle WA

2010
Subscription Service – Individuals



The SectorSurfer website features a navigation bar with links: Home, Example Strategies, Using SectorSurfer, Advanced Topics, Theory, Member Plans, Referral Program, and F.A.Q. The main header includes 'Log In', 'Log Off', and 'Sign Up' buttons. The central banner displays the 'SectorSurfer' logo and the tagline 'Sector Rotation Investment Strategies'. Below this, a green banner states 'SectorSurfer uses ... True Sector Rotation Algorithms' with bullet points: 'Know when trends start and end' and 'Own only the trend leader'. A 'Learn More' button is present. A series of five small images labeled 'Returns', 'Safety', 'Simplicity', 'Control', and 'Examples' are shown. A 'Welcome!' section explains the platform's value proposition. A 'SectorSurfer's Value Proposition' section includes a 'SAFETY FIRST' graphic and a 'Merlyn.AI' logo. A '1. Best Safety Performance' section highlights 'StormGuard Armor' and 'Bear Market Strategies'. A 'Video: Reducing Risk' section includes links for 'S.G.-Armor Details', 'StormGuard Operation', and 'Bear Market Strategies'.

SectorSurfer uses ...
True Sector Rotation Algorithms

- Know when trends start and end
- Own only the trend leader

Welcome!

SectorSurfer levels the playing field with Wall Street by putting the power of *award winning* high performance investment algorithms in your hands. Its **True Sector Rotation** algorithm holds only the momentum leader during bull markets, and its **StormGuard** algorithm protects and grows your assets during bear markets. Only by owning the trend leader and avoiding the trend laggards can you simultaneously *improve returns* and *reduce risk*.

SectorSurfer's Value Proposition
We believe high performance investment software should be for everyone – not just Wall Street.

1. Best Safety Performance

StormGuard Armor™

- Never ride to the bottom of a market crash again!
- Outperforms all simple market direction indicators.
- Uses measures of price, momentum and sentiment.
- Incorporates PID Signal Processing and Fuzzy Logic.

Bear Market Strategies

- Exiting bear markets to cash is a thing of the past.
- Our Bear Market Symbol enables specifying a ticker symbol or a Bear Market Strategy instead of cash.

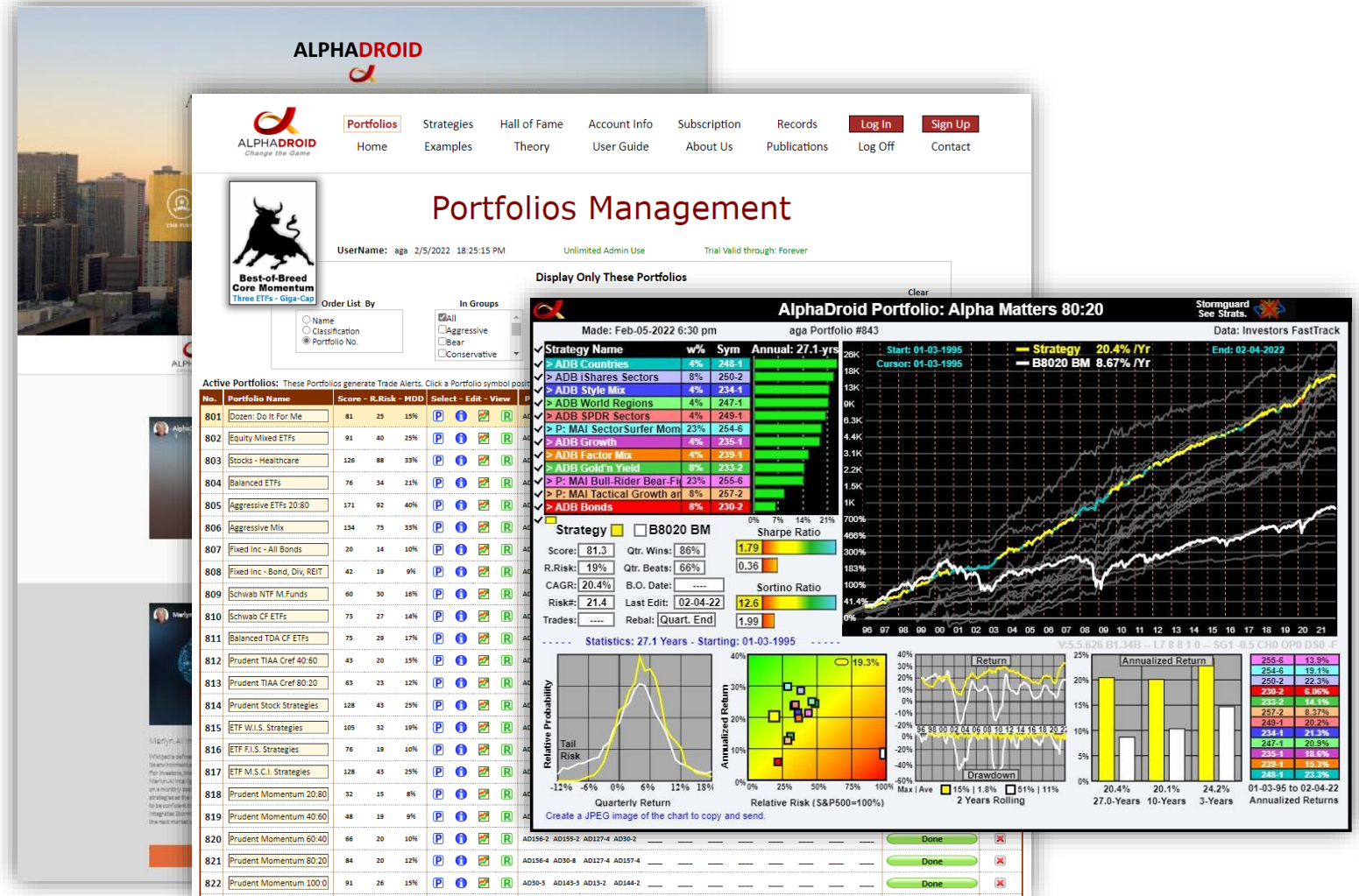
Video: Reducing Risk ▶

S.G.-Armor Details

StormGuard Operation

Bear Market Strategies

2017
Subscription Service – Advisors



The AlphaDroid website features a navigation bar with links: Home, Examples, Theory, User Guide, About Us, Publications, Log Off, and Contact. The main header includes 'Log In' and 'Sign Up' buttons. The central banner displays the 'AlphaDroid' logo and the tagline 'Change the Game'. Below this, a 'Portfolios Management' section shows a list of active portfolios. A 'Display Only These Portfolios' section includes a 'Clear' button and a 'Strategy Name' dropdown. A 'Statistics: 27.1 Years - Starting: 01-03-1995' section displays various performance metrics. A 'Relative Risk' section shows a heatmap. A 'Return' section shows a line chart. A 'Drawdown' section shows a line chart. A 'Quarterly Return' section shows a line chart. A 'Create a JPEG image of the chart to copy and send' button is present. A 'Done' button is present. A 'Done' button is present. A 'Done' button is present.

Portfolios Management

User Name: age 2/5/2022 18:25:15 PM Unlimited Admin Use Trial Valid through: Forever

Order List By: ☐ Name ☐ Classification ☒ Portfolio No.

In Groups: ☒ All ☐ Aggressive ☐ Bear ☐ Conservative

Active Portfolios: These Portfolios generate Trade Alerts. Click a Portfolio symbol position.

No.	Portfolio Name	Score	R.Risk	MDD	Select	Edit	View
801	Dozen: Do It For Me	81	25	15%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
802	Equity Mixed ETFs	91	40	25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
803	Stocks - Healthcare	126	88	35%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
804	Balanced ETFs	76	34	21%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
805	Aggressive ETFs 20:80	171	92	40%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
806	Aggressive Mix	134	75	35%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
807	Fixed Inc - All Bonds	20	14	10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
808	Fixed Inc - Bond, Div, REIT	42	19	9%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
809	Schwab NTF M. Funds	60	30	16%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
810	Schwab CF ETFs	73	27	14%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
811	Balanced TDA CF ETFs	75	29	17%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
812	Prudent TIAA Cref 40:60	43	20	15%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
813	Prudent TIAA Cref 80:20	63	23	12%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
814	Prudent Stock Strategies	128	43	25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
815	ETF W.I.S. Strategies	105	32	19%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
816	ETF F.I.S. Strategies	76	19	10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
817	ETF M.S.C.I. Strategies	128	43	25%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
818	Prudent Momentum 20:80	32	15	8%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
819	Prudent Momentum 40:60	48	19	9%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
820	Prudent Momentum 60:40	66	20	10%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
821	Prudent Momentum 80:20	84	20	12%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
822	Prudent Momentum 100:0	91	26	15%	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Statistics: 27.1 Years - Starting: 01-03-1995

Score: 81.3 Qtr. Wins: 86% Sharpe Ratio: 1.79
R.Risk: 19% Qtr. Beats: 66% Sortino Ratio: 0.36
CAGR: 20.4% B.O. Date: ---
Risk: 21.4 Last Edit: 02-04-22 Trades: --- Rebal: Quart. End 1.99

Relative Risk

Return

Drawdown

Quarterly Return

Create a JPEG image of the chart to copy and send.

Done

Done

Done

SumGrowth Strategies, LLC

Seattle WA

2010

Subscription Service – Individuals



Welcome!

SectorSurfer levels the playing field with Wall Street by putting the power of *award winning* high performance investment algorithms in your hands. Its **True Sector Rotation** algorithm holds only the momentum leader during bull markets, and its **StormGuard** algorithm protects and grows your assets during bear markets. Only by owning the trend leader and avoiding the trend laggards can you simultaneously *improve returns* and *reduce risk*.

SectorSurfer's Value Proposition

We believe high performance investment software should be for everyone – not just Wall Street.

1. Best Safety Performance

Explains



StormGuard Armor™

- Never ride to the bottom of a market crash again!
- Outperforms all simple market direction indicators.
- Uses measures of price, momentum and sentiment.
- Incorporates PID Signal Processing and Fuzzy Logic.

Bear Market Strategies

- Exiting bear markets to cash is a thing of the past.
- Our Bear Market Symbol enables specifying a ticker symbol or a Bear Market Strategy instead of cash.

Video: Reducing Risk ▶

S.G.-Armor Details

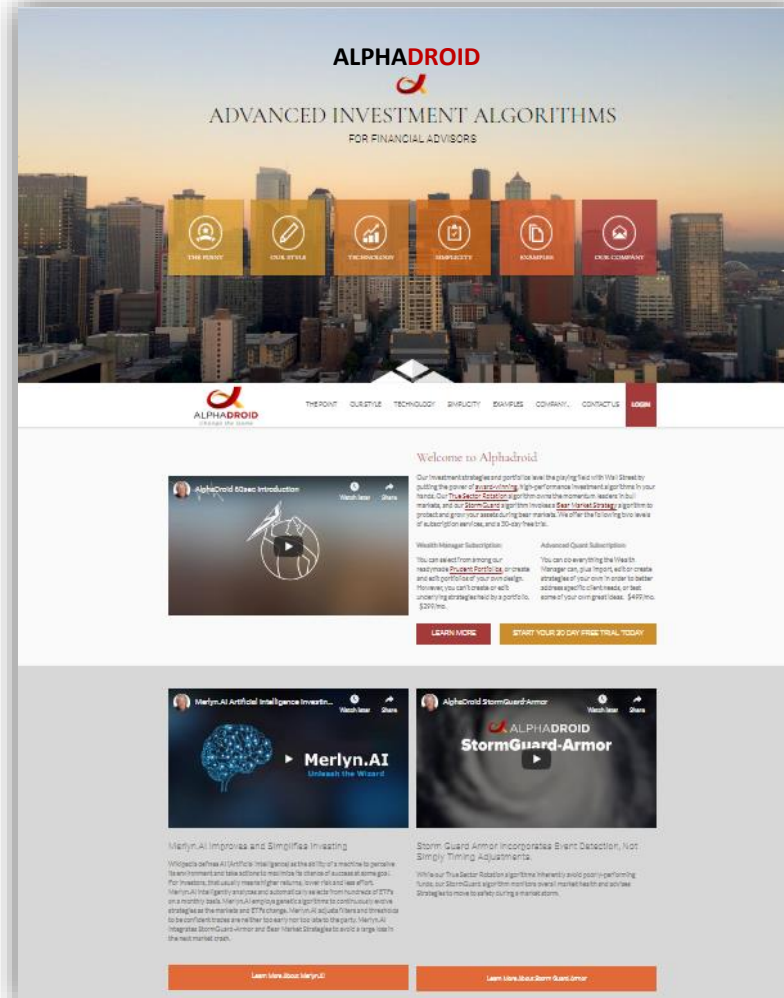
StormGuard Operation

Bear Market Strategies

www.SectorSurfer.com

2017

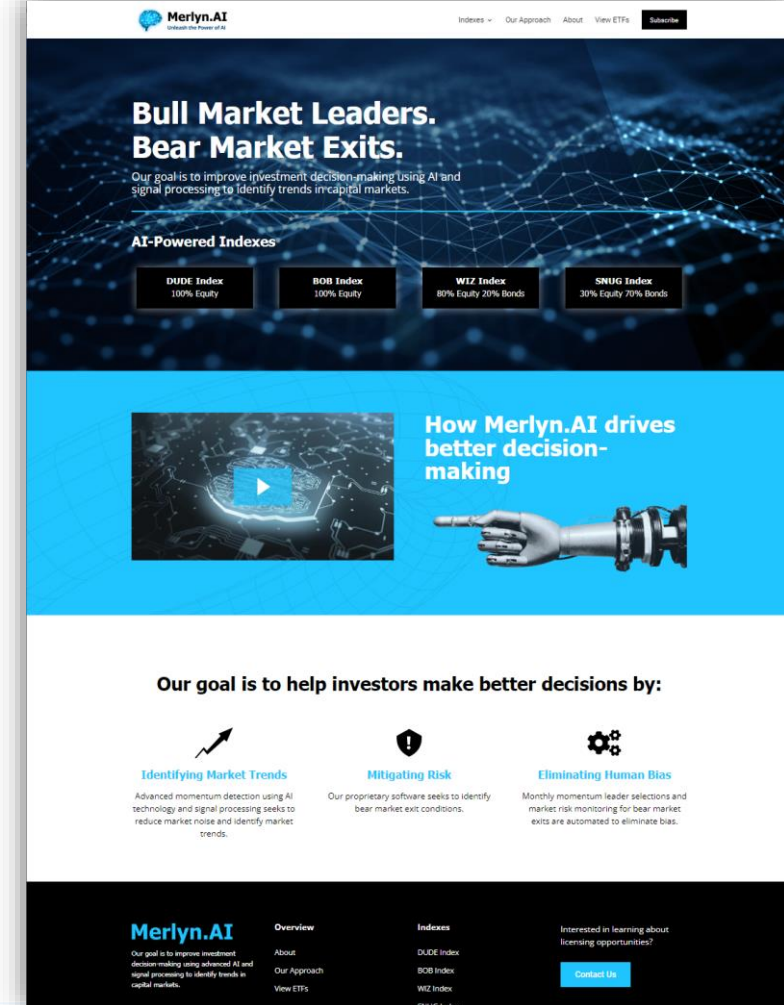
Subscription Service – Advisors



www.AlphaDroid.com

2019

Index Provider to Merlyn.AI



Merlyn.AI

Our goal is to improve investment decision-making using advanced AI and signal processing to identify trends in capital markets.

Overview

About
Our Approach
View ETFs

Indexes

DUDE Index
BOB Index
WIZ Index
SNUG Index

Interested in learning about licensing opportunities?

Contact Us

www.Merlyn.AI

Our Free Newsletter

[See Past Issues or Subscribe](#)



Perspective: Is It "Deja Vu All Over Again?"

Sept. 29, 2022

Overview: Worse than a Normal Recession?

The S&P500 lost 15% since the Bear Market Rally peaked in mid-August, and has just retested the mid-June market low and today is heading lower. Jim Cramer of CNBC [recently stated](#) "We're now in 'good news is bad news' mode, because the Fed's not going to stop bringing the pain until we see real deterioration." Morgan Stanley [strategists warned](#) on Monday that the recent rally in the U.S. dollar is creating an "untenable situation" for riskier assets that could end in a financial or economic crisis. Morgan Stanley [further warned](#) on Wednesday that a corporate earnings recession may be coming that could be worse than a "normal" recession. Until the VIX volatility indicator exceeds 40, professional traders generally won't believe there has been sufficient capitulation to confirm a market bottom. Currently the VIX is at about 30, indicating that the market bottom is quite likely lower. Slowing the economy means business revenues drop, earnings shrink, and stock prices follow suit. Similarities to 2008 abound. Buckle up and "Don't fight the Fed."

Buckle Up Options

Our StormGuard indicator remains negative and is declining. Unfortunately, proficiently buckling up in 2022 has been quite a challenge – sharply rising interest rates have pummeled bond and treasury funds concurrent with the ongoing decline in the equities market. Many professionals are beginning to question the future viability of the classic 60/40 portfolio. The BlackRock 60/40 Target Allocation Fund (BIGPX), for example, is now down 20.6% YTD. Even the SPDR Gold ETF (GLD) has declined similarly over the past 7 months.



The 10% summer rally in long-term Treasuries was among factors that led a number of our Bear Market Strategies to select from this category in September. However, the Fed surprised many in September with the seriousness of its hawkish stance on inflation and interest rate hikes resulting in the further decline in bonds and treasuries. The two primary options for buckling up are described below.



Buckle Up - Basic

While [StormGuard](#) seeks to determine when equities markets appear to be bullish or bearish, the purpose of a [Bear Market Strategy](#) is to evaluate defensive fund candidates when StormGuard is triggered. We have recently reviewed our many posted Bear Market Strategies (that you may integrate into your own equity Strategies) to ensure their defensive candidates include a robust range of short-term to long-term bond options. At this time, it appears that the more stable shorter-term bond candidates will be favored. If your Strategies employ an integrated Bear Market Strategy you are buckled up.

What Lies Ahead?

Parking a car with precision would be virtually impossible if there were only a few seconds of delay in your visual perception. Given that most economic indicators have one to six months of lag in response to stimulative action taken by the Fed or Congress, by the time economic indicators are reported and actionable, economic reality is already a few months further down the road. That, by itself, makes a soft landing virtually impossible. On August 31, it was unknown whether or not the market would retest the June lows. Today the S&P500 broke through the June low for a second time this week, resulting in a new 2022 market low. Still, having had no sign of capitulation but having steadily deteriorating economic news, it appears that the market is poised for another leg down.

Three Hypothetical Technical Support Levels for the Market



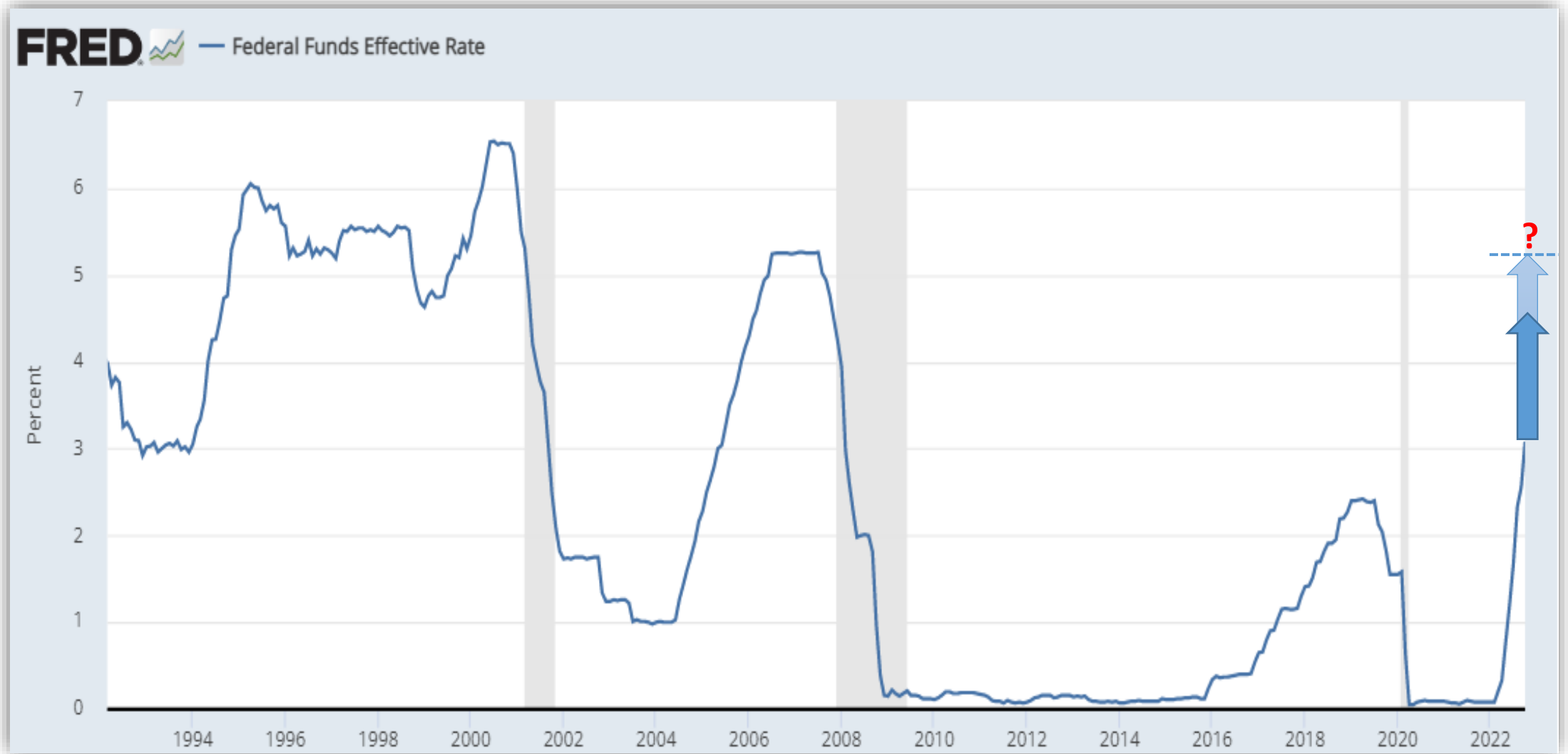
VIX History

When the VIX Volatility Index exceeds 40, it is believed to be a sign of capitulation indicating fear is rampant and rapidly declining prices are producing margin calls in over-leveraged accounts.

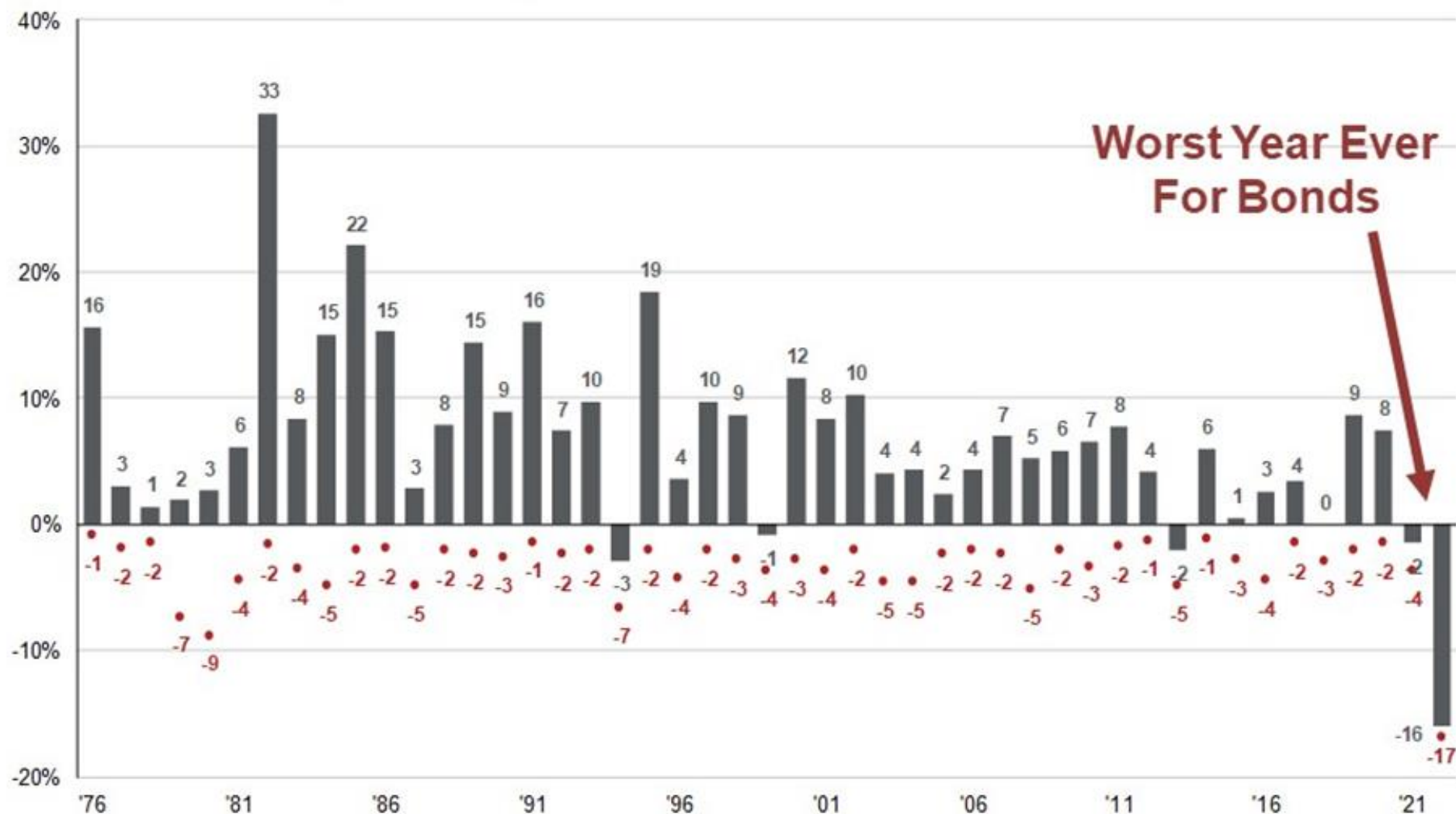
VIX Volatility Index



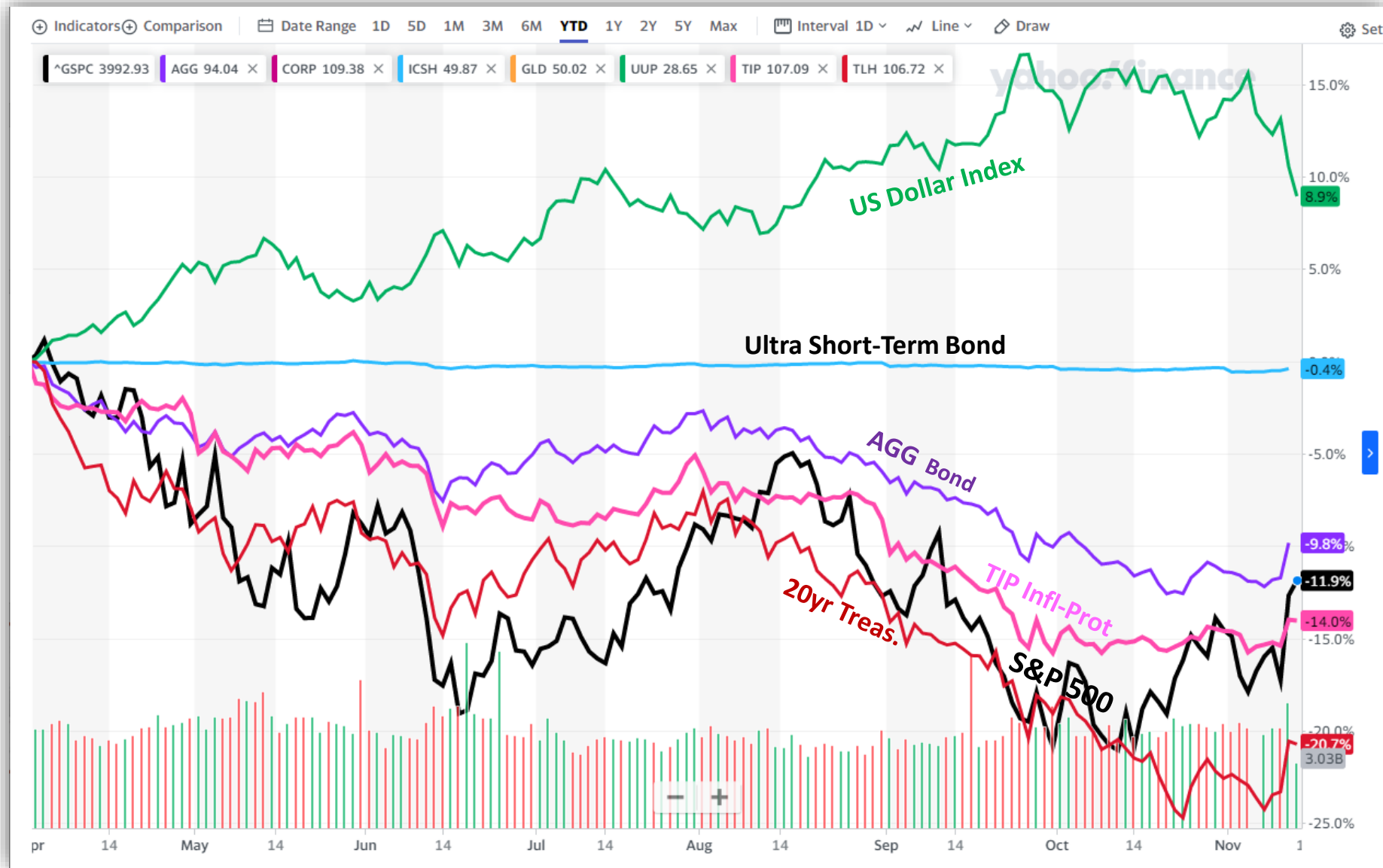
Backdrop for Today's Discussion: Federal Funds Rate – Sharp Rise \Rightarrow Bonds Drop



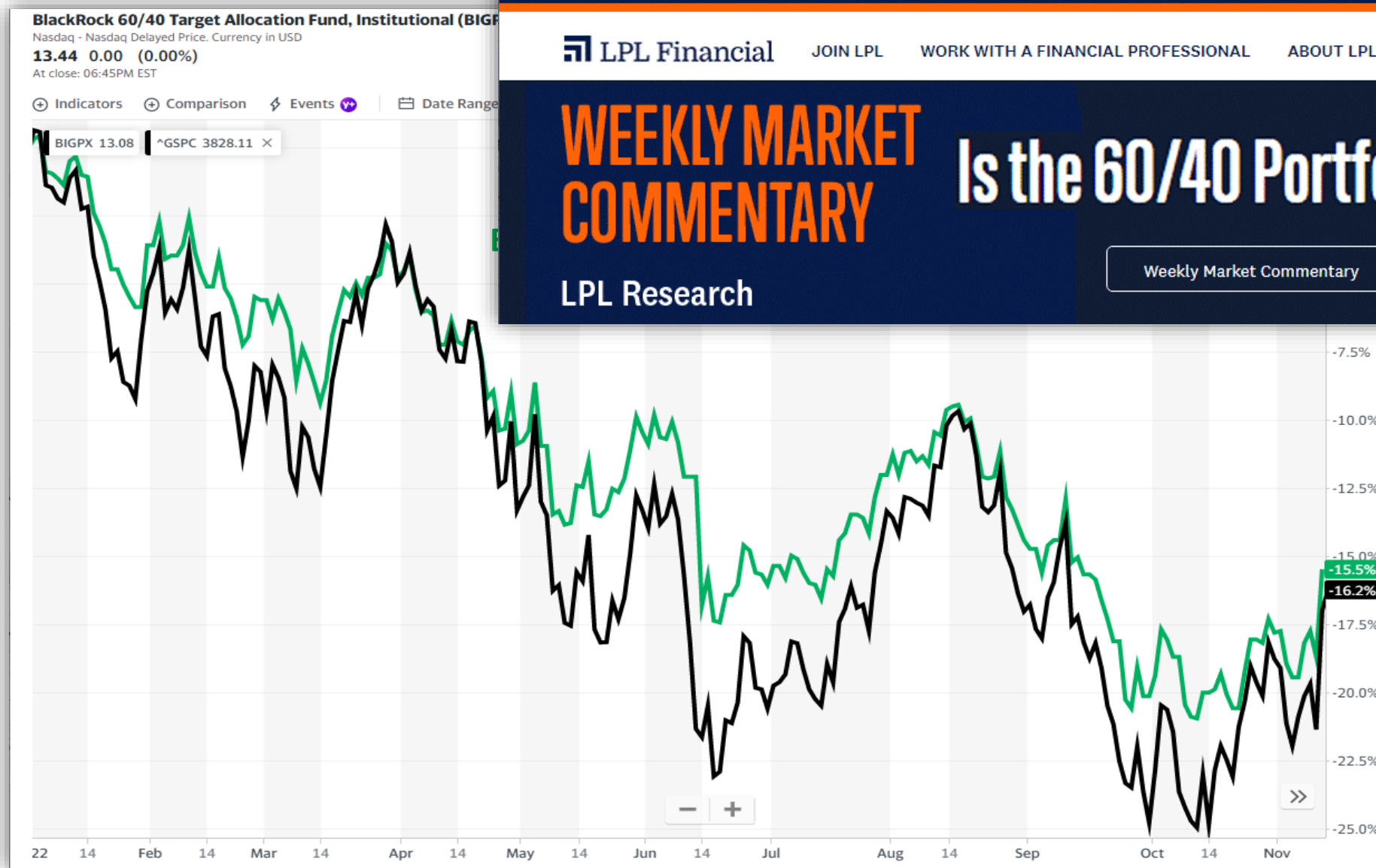
Bloomberg U.S. Agg. Annual Returns and Intra-Year Declines



YTD 2022 - Defensive Funds

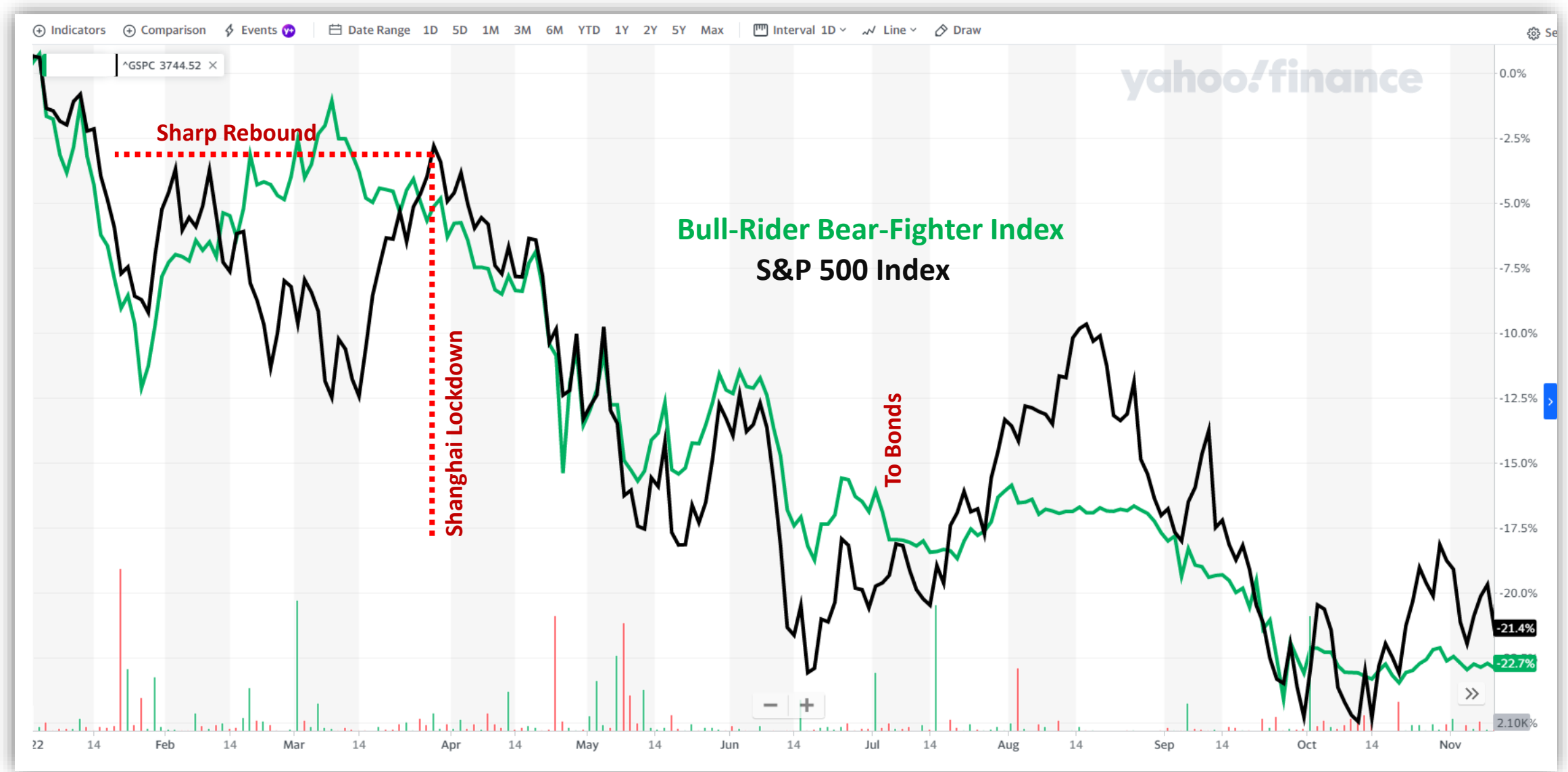


Standard 60/40 Portfolio – YTD 2020



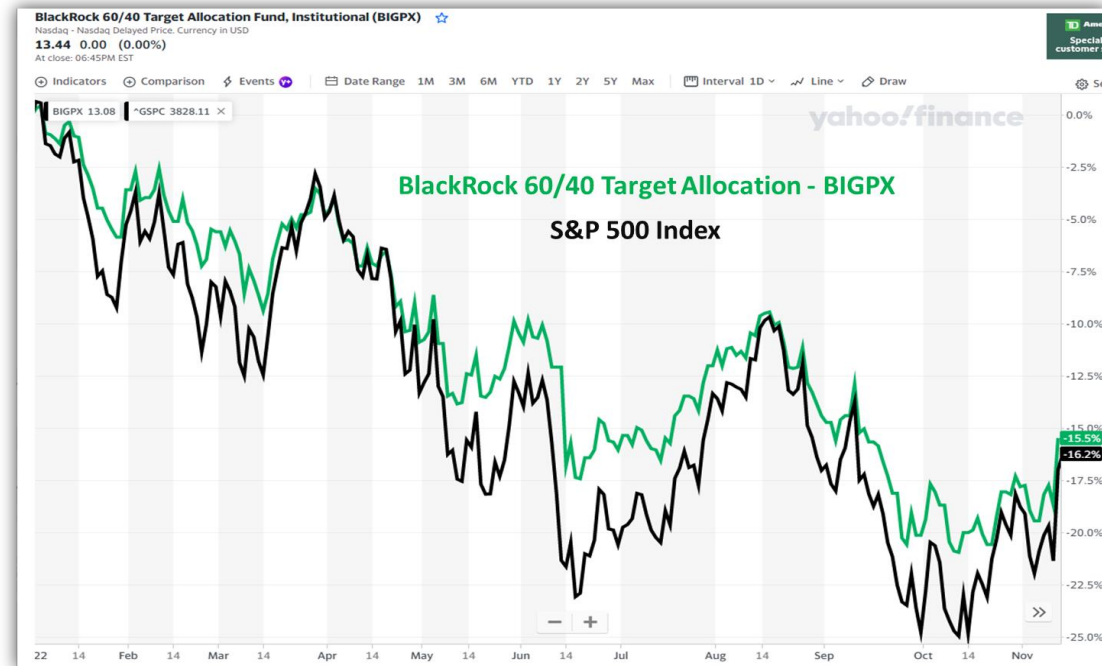
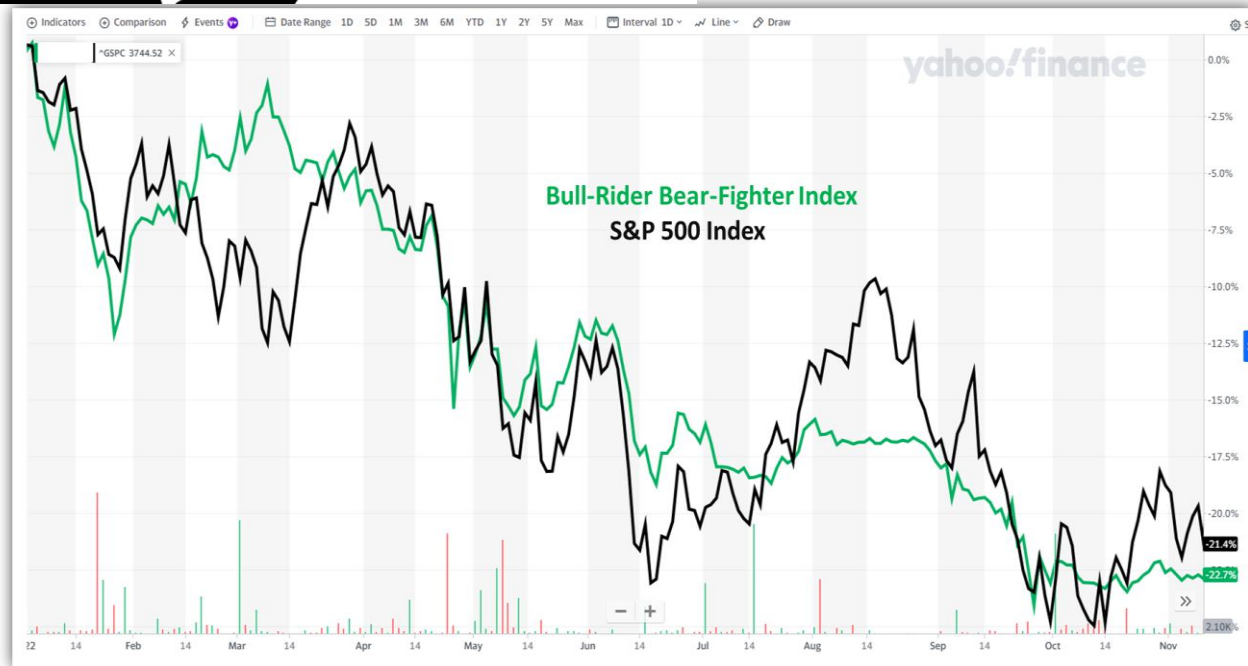
Bull-Rider Bear-Fighter Index

YTD to 11/9/2022





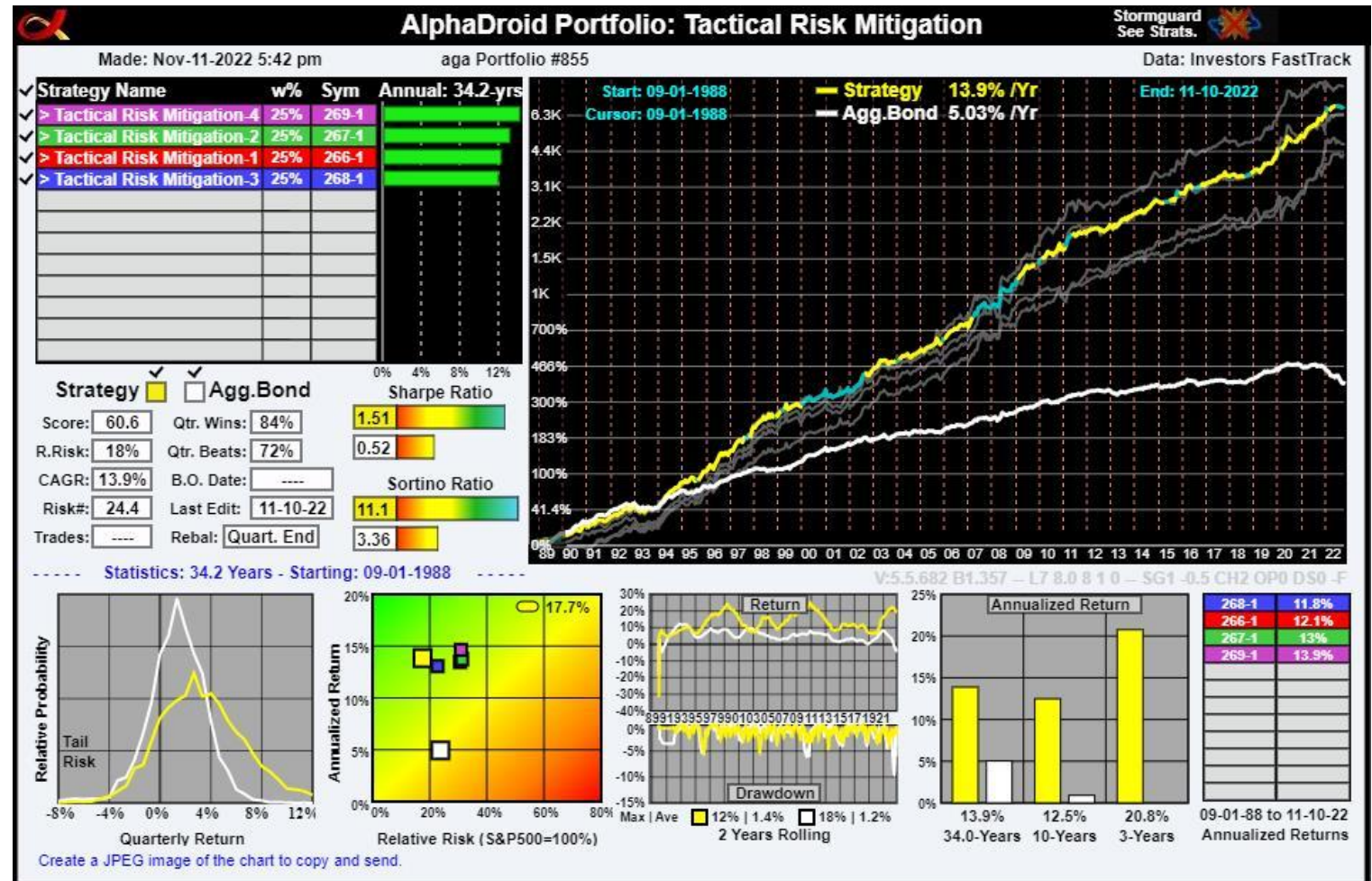
**Hey!
These Aren't Working!
Will Someone Please Fix It?**



You Asked For
More Safety!
We Went to Work!



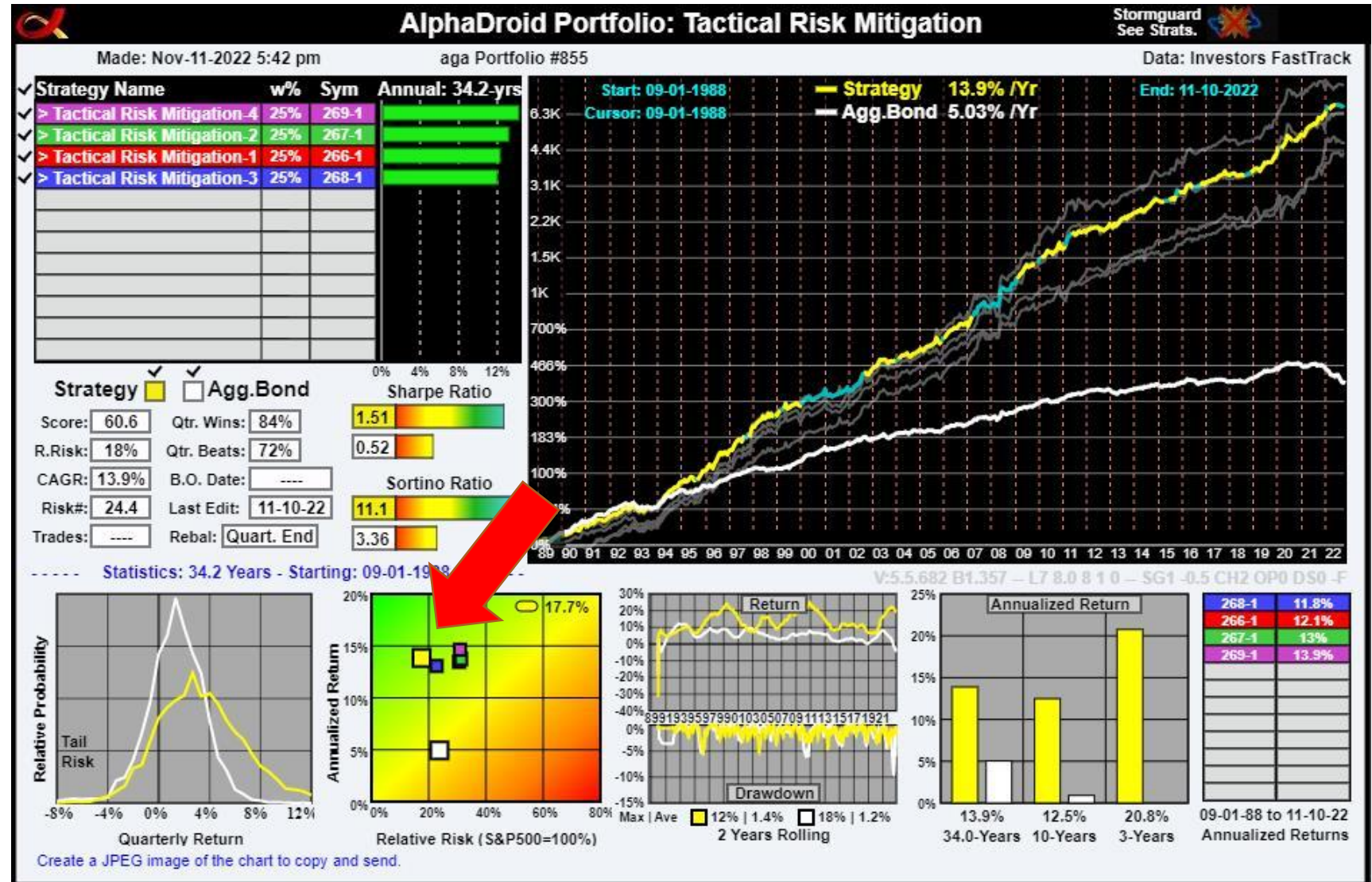
Introducing the Tactical Risk Mitigation Index



Introducing the Tactical Risk Mitigation Index

- Lower Risk than AGG
- Higher Return than SPY
- Best All Weather Index

Let's Go Online























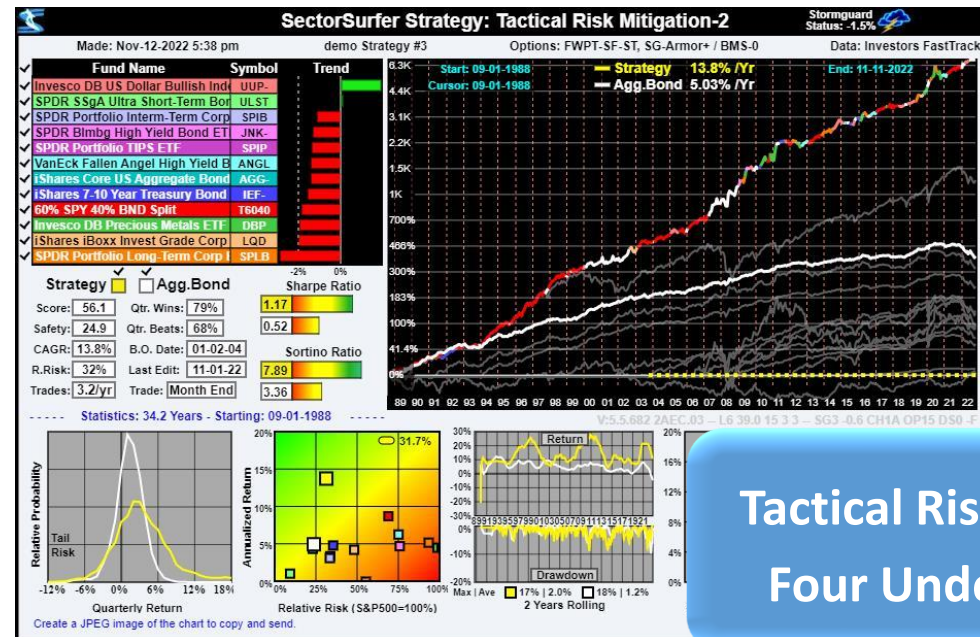
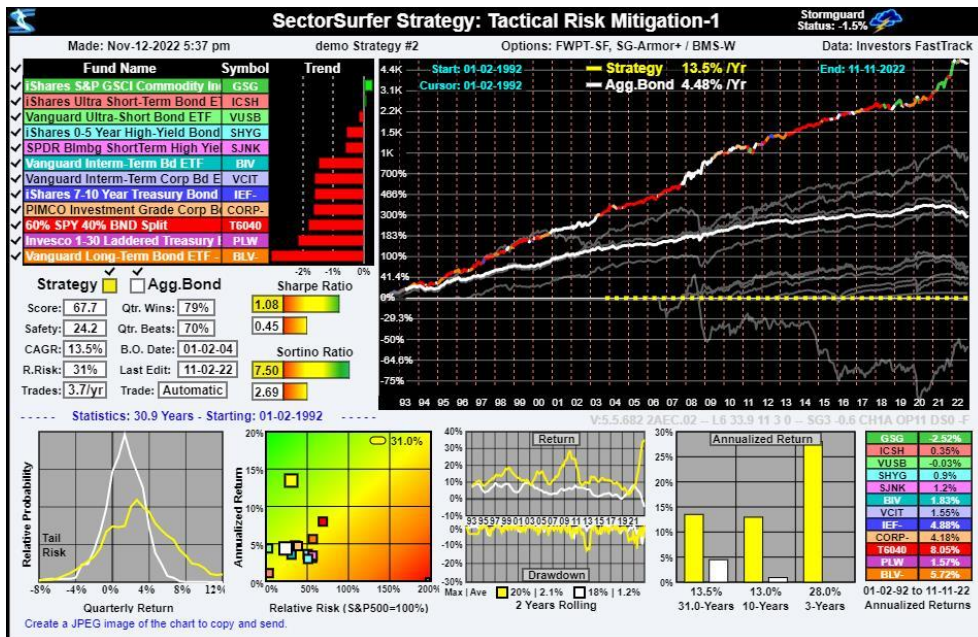
Online SectorSurfer Demo

Focussed on Tactical Risk Mitigation Index

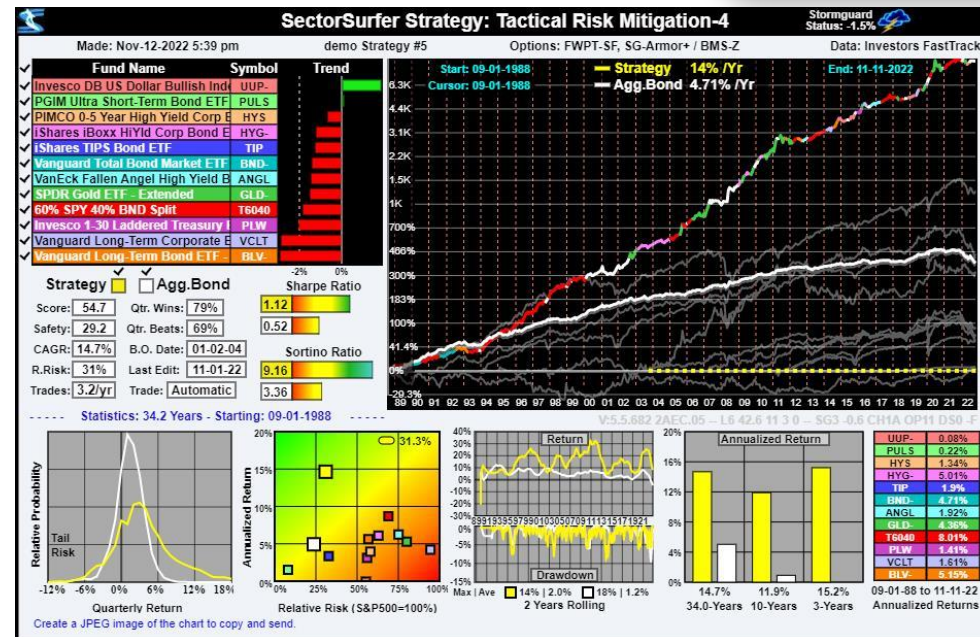
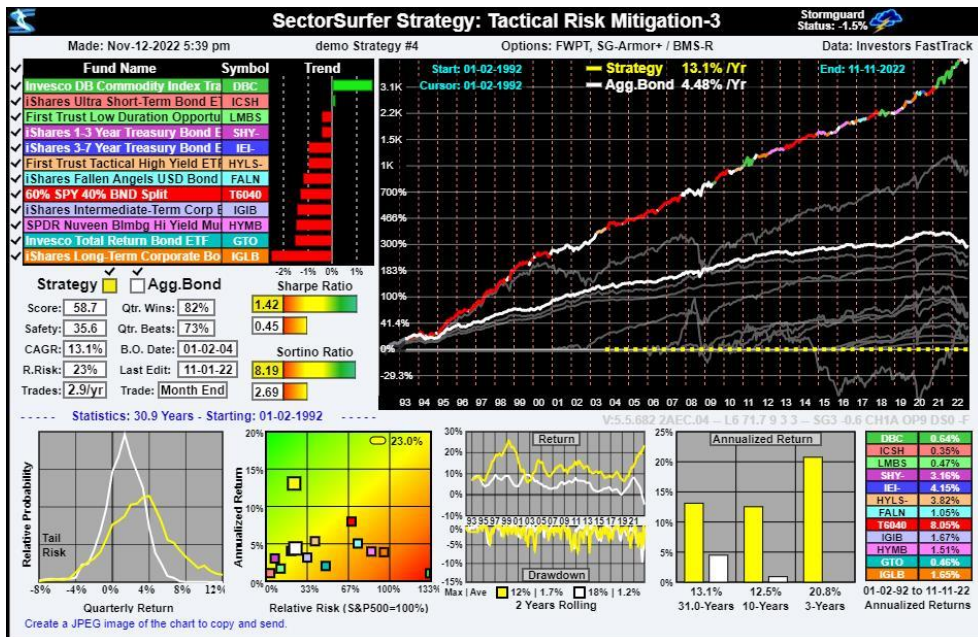
Tactical Risk Mitigation Design

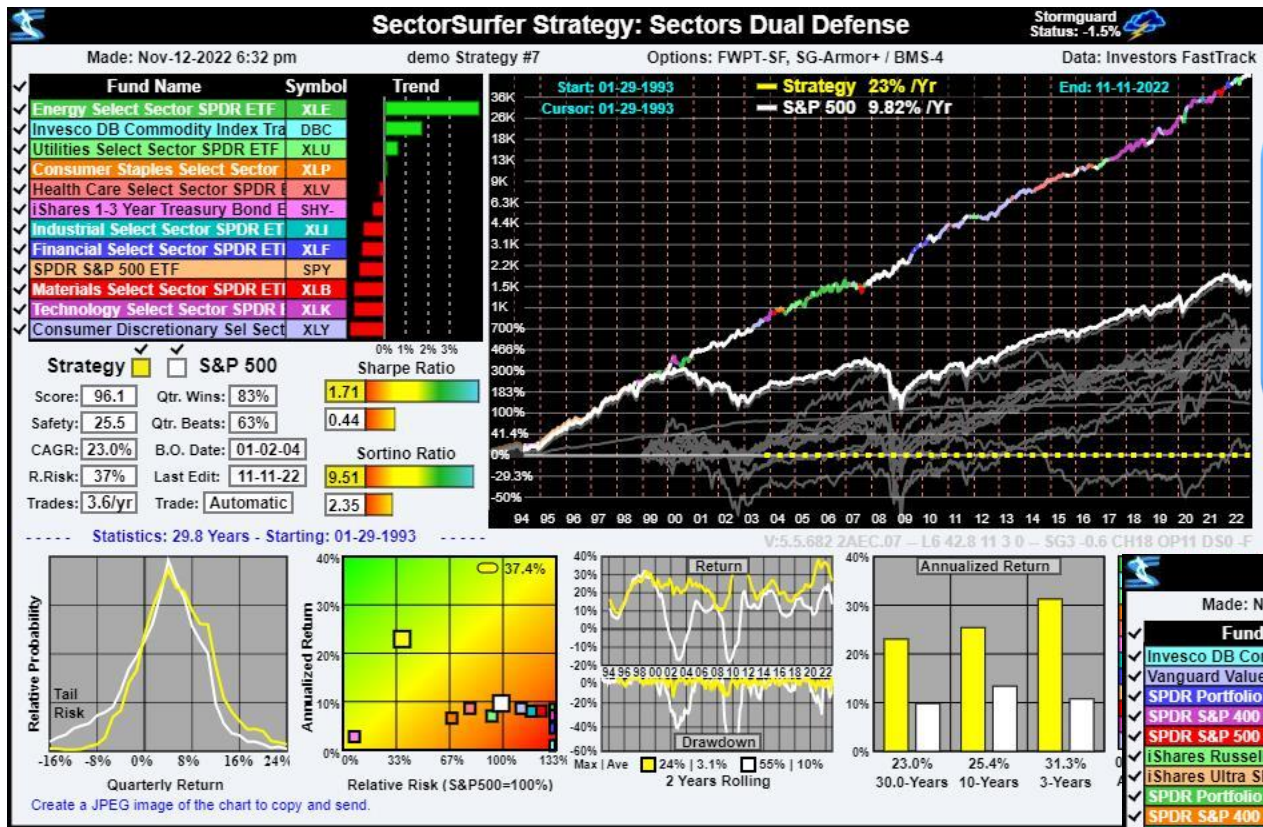
1. T6040 Backbone (Target Allocation 60% SPY 40% AGG. (Like putting on body armor to reduce injury.)
2. Backbone direct momentum-challengers: bonds, treasuries, and commodities. (Like a guard dog at the front door.)
3. StormGuard-Armor oversight override: bonds, treasuries, and commodities. (Like a guard dog at the back door.)

2	Name: Tactical Risk Mitigation-1	 	T6040	GSG	IEF-	PLW	BLV-	BIV	SELL: -New-		
PAID	Score: 68	Safety: 24	MDD: 20%	 	VUSB	ICSH	VCIT	CORP-	SJNK	SHYG	BUY: BSV
3	Name: Tactical Risk Mitigation-2	 	T6040	DBP	IEF-	SPIP	SPLB	AGG-	SELL: -New-		
PAID	Score: 56	Safety: 25	MDD: 17%	 	ULST	UUP-	SPIB	LQD	JNK-	ANGL	BUY: ICSH
4	Name: Tactical Risk Mitigation-3	 	T6040	DBC	IEI-	SHY-	IGLB	GTO	SELL: -New-		
PAID	Score: 59	Safety: 36	MDD: 12%	 	LMBS	ICSH	IGIB	HYLS-	HYMB	FALN	BUY: MINT
5	Name: Tactical Risk Mitigation-4	 	T6040	GLD-	TIP	PLW	BLV-	BND-	SELL: -New-		
PAID	Score: 55	Safety: 29	MDD: 14%	 	PULS	UUP-	VCLT	HYS	HYG-	ANGL	BUY: MINT
6	Name: P: Tactical Risk Mitigation Index	 	SSS2	SSS3	SSS4	SSS5	___	___	SELL: -New-		
FREE	Score: 61	Safety: 62	MDD: 12%	 	___	___	___	___	___	___	BUY: Rebal



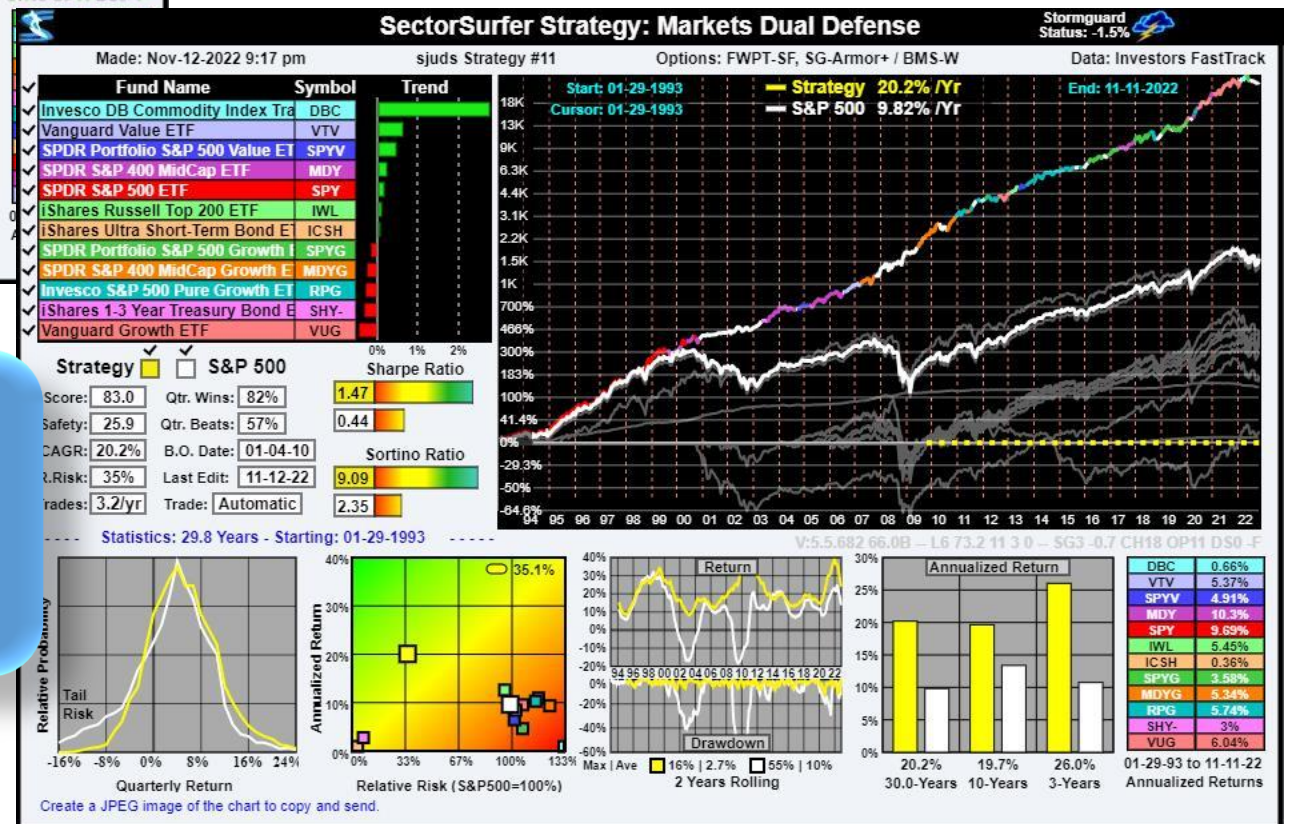
Tactical Risk Mitigation Index
Four Underlying Strategies





Sectors Dual Defense Strategy:

- Based on the original SPDR-9 Sectors
- 1st Defense: StormGuard-Armor BMS-W
- 2nd Defense: Direct Momentum Challenge with DBC, SHY, and SPY



Markets Dual Defense Strategy:

- Based on mid, large, value, growth ETFs
- 1st Defense: StormGuard-Armor BMS-W
- 2nd Defense: Direct Momentum Challenge with DBC, ICSH, and SHY

[Introduction](#)
[Market Heat Map](#)
[Risk Avoidance](#)
[Bear Strategies](#)
[Portfolio Design Tool](#)
[Essential Videos](#)
[Getting On Board](#)
[Print to PDF](#)

Risk Avoidance

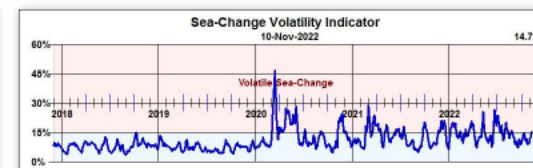
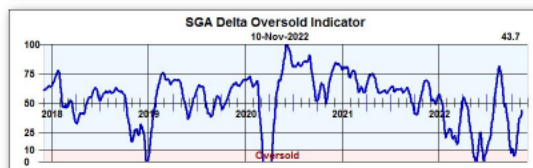
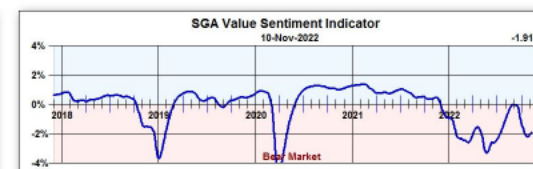
Risk is Not a One-Dimensional Problem



Explore

[A Quick Video Tour](#)
[StormGuard-Armor](#)
[Black Swan Vaccination](#)
[Bear Market Strategies](#)
[StormGuardData.csv](#)


Click a chart below to expand it.



Narrative: StormGuard-Armor has formally triggered for month-end traded Strategies and its designated defensive Bear Market Strategy will be employed. The market is now in a "Prolonged Bear" condition, which will persist until both the Price-Trend and Institutional Momentum Indicators turn positive and drive the SG-Armor Indicator positive. NOTE: StormGuard-Armor, like a smoke alarm, is not perfectly clairvoyant but helps improve your long-term batting average.

VIX-40 Capitulation?

Was Inflation Response a Head Fake?

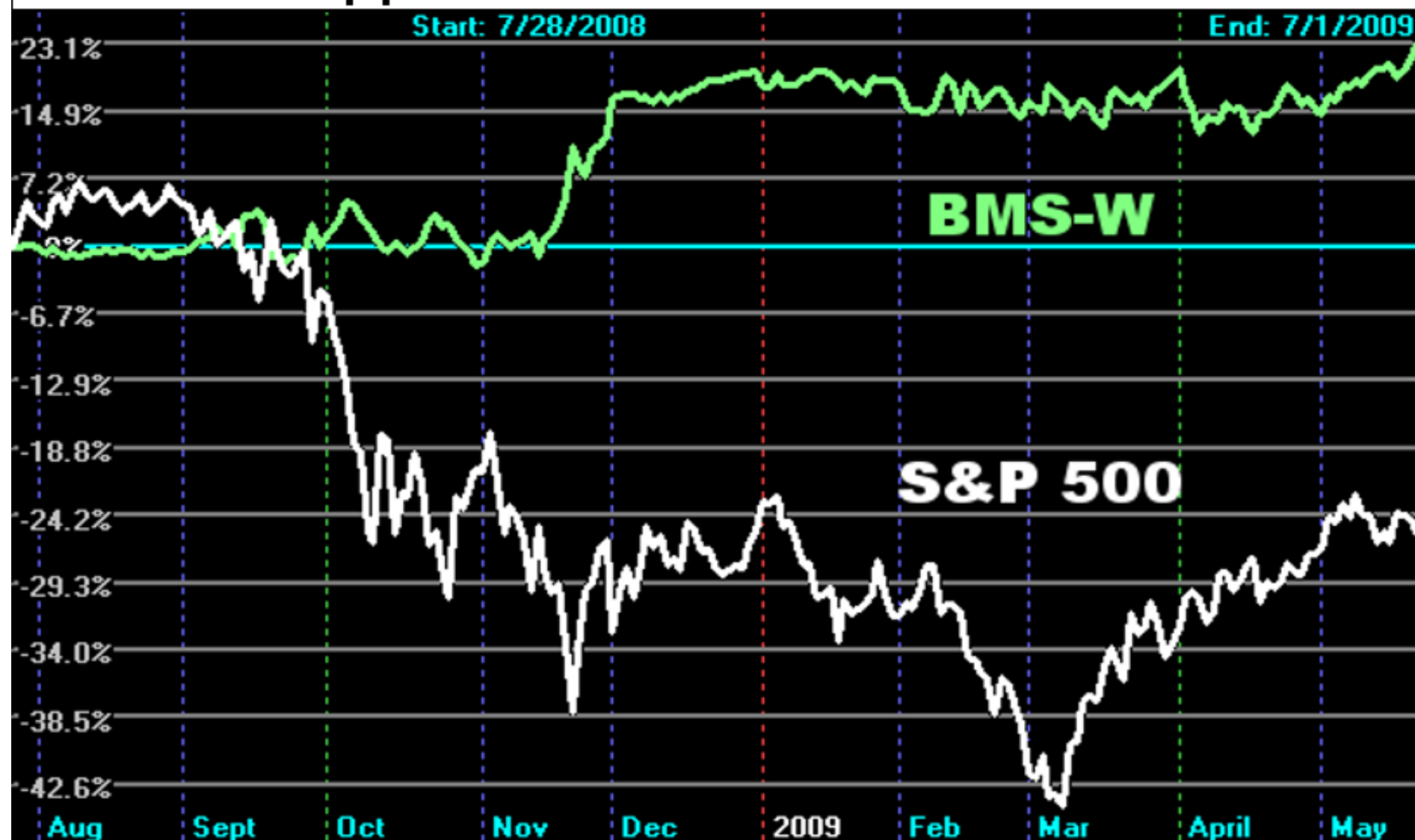
- AI now reads the inflation news and trades instantly!
- What about bull rebound hardening resolve of the Fed?
- What about need to drain excess cash and fear for jobs?
- What about energy tight supply & inflation this winter?
- What about Fed hikes hurting Xmas sales/earnings/price?



2008 All Over Again?



What Happened in 2008 From Here Forward



5 Minute Break

Then Dive into the Tech Details

Please Check Out the Essential Videos Found Here:

<https://www.alphadailybrief.com/Pages/HeatMap.aspx>

<https://www.alphadailybrief.com/Pages/RiskAvoidance.aspx>

<https://www.alphadailybrief.com/Pages/BearStrategies.aspx>

<https://www.merlyn.ai/>

<https://www.alphadailybrief.com/Pages/EssentialVideos.aspx>

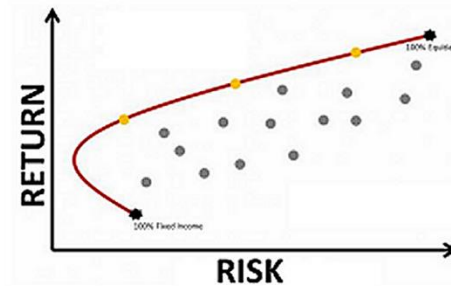
MPT: Diversify and Rebalance

The Efficient Frontier Is The Best You Can Do

Vintage 1952

65 Years Old Is
Retirement Age

Modern
Portfolio
Theory



Printers



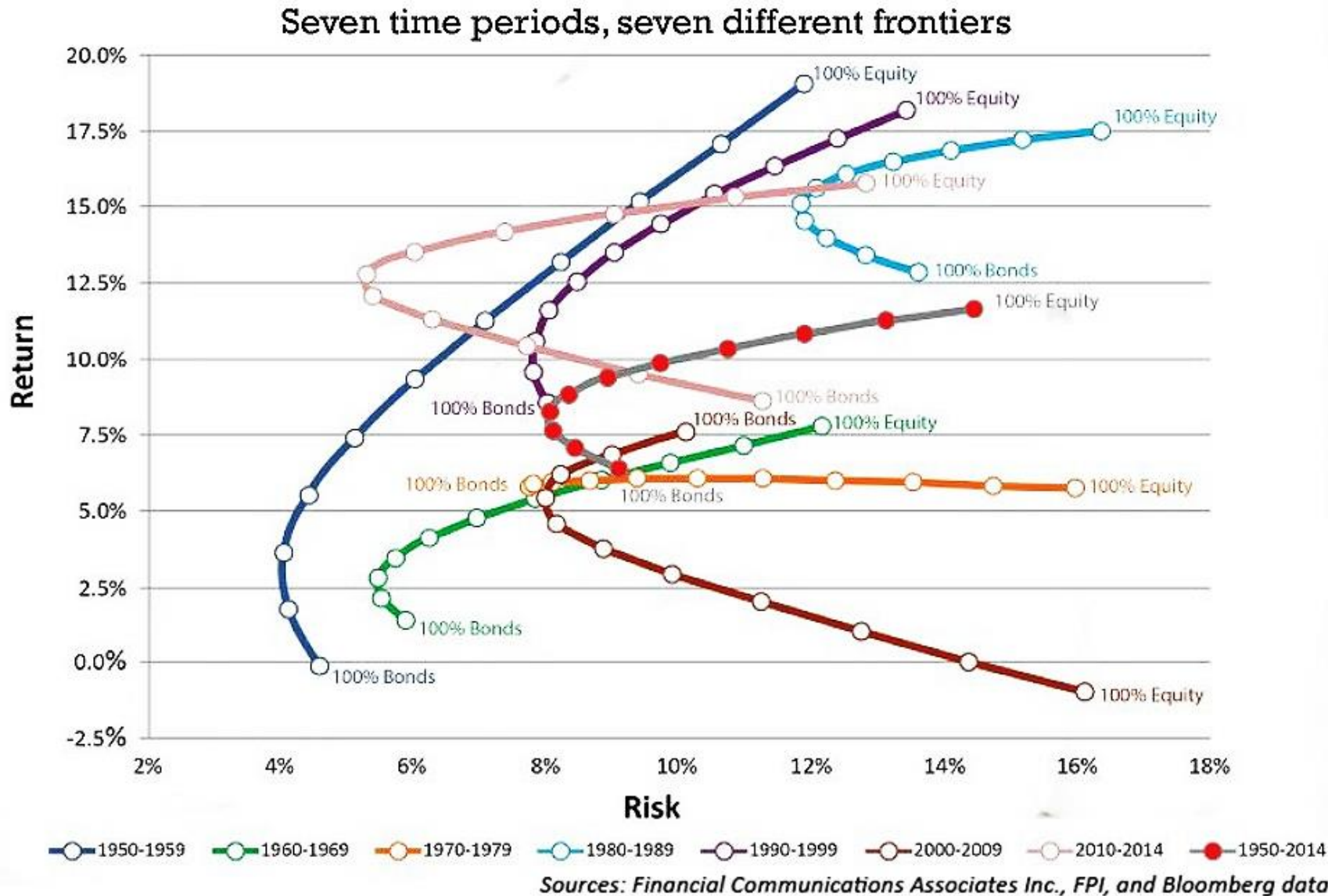
Phones



Cars



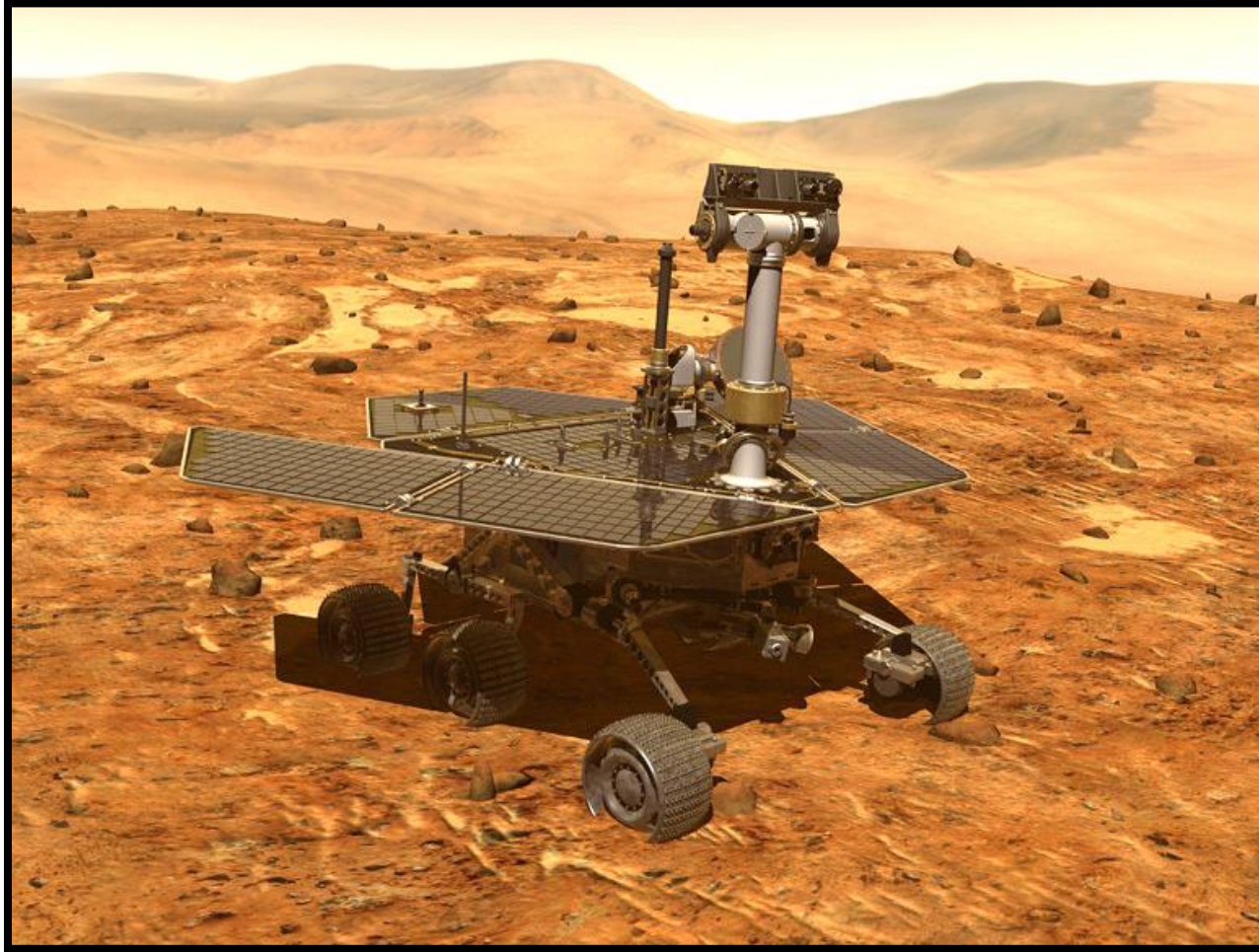
The Efficient Frontier Is The Best You Can Do



MPT:
Based On
Hindsight Bias

MPT:
Momentum
Not Employed

What Changed After 1952 to Get Us Here?



Mars Rover - Opportunity



iPhones

Momentum in Market Data



Narasiman Jegadeesh
Emory University



Sheridan Titman
U. of Texas, Austin

Seminal Academic Paper:

**“Returns to Buying Winners and Selling Losers:
Implications for Stock Market Efficiency”
(1993)**

Profitability of Momentum Strategies: An Evaluation of Alternative Explanations

By Narasiman Jegadeesh and Sheridan Titman (2001)

Following Jegadeesh and Titman (1993), at the end of each month we rank the stocks in our sample based on their past six-month returns (Month -5 to Month 0) and then group the stocks into 10 equally weighted portfolios based on these ranks. Each portfolio is held for six months (Month 1 to Month 6) following the ranking month.

Table I
Momentum Portfolio Returns

This table reports the monthly returns for momentum portfolios formed based on past six-month returns and held for six months.

	All Stocks		
	1965–1998	1965–1989	1990–1998
P1 (Past winners)	1.65	1.63	1.69
P2	1.39	1.41	1.32
P3	1.28	1.30	1.21
P4	1.19	1.21	1.13
P5	1.17	1.18	1.12
P6	1.13	1.15	1.09
P7	1.11	1.12	1.09
P8	1.05	1.05	1.03
P9	0.90	0.94	0.77
P10 (Past losers)	0.42	0.46	0.30

1.65% / mo. = 21.7% / yr

16.8% Diff.

0.40% / mo. = 4.9% / yr

Momentum in Market Data



Eugene Fama
Nobel Prize, 2013



Kenneth French
Dartmouth College

“the premier market anomaly” that’s “above suspicion.”

Academic Paper:
“Dissecting Anomalies”
(2008)

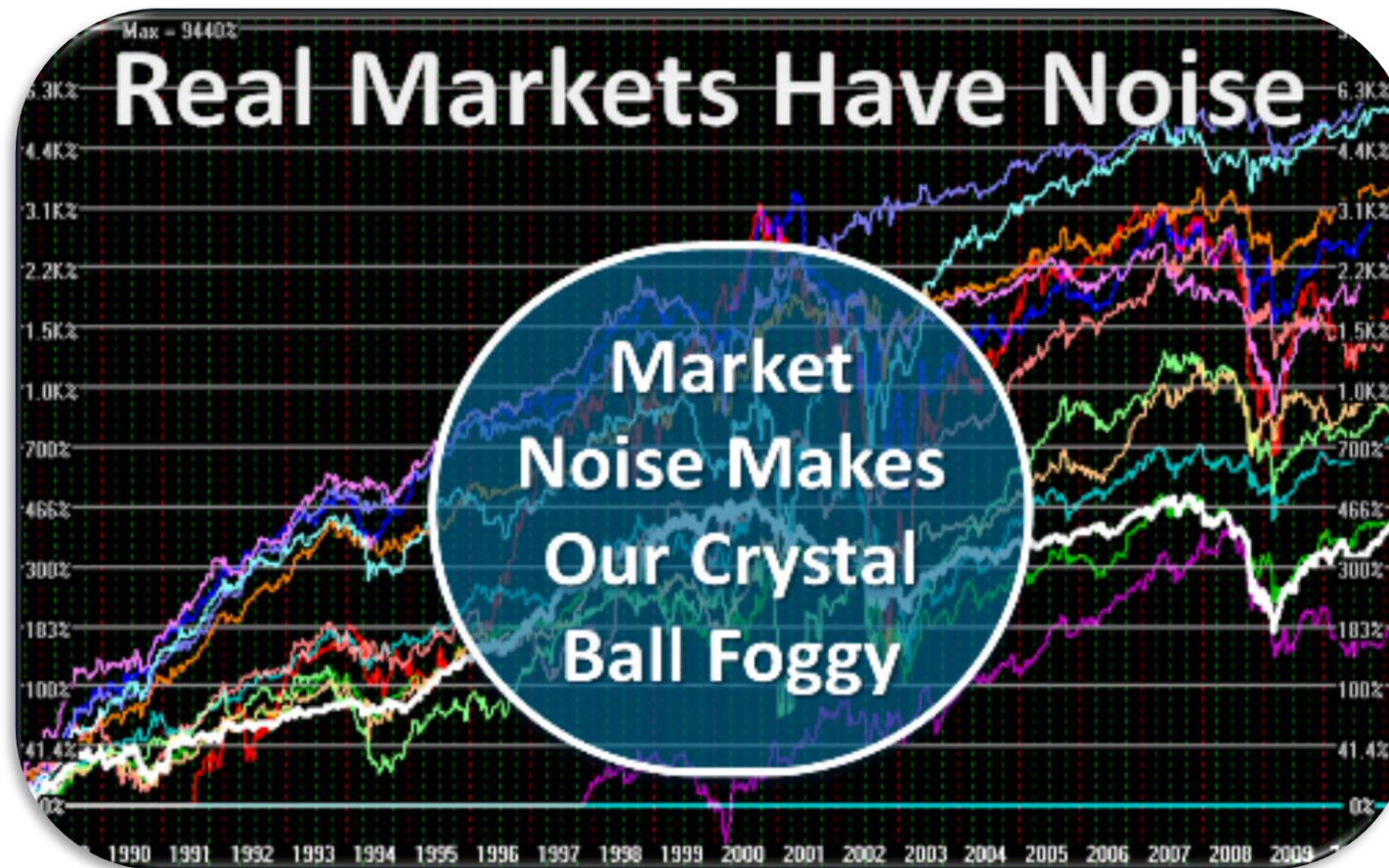
Trends / Momentum are Real

By definition, momentum is a “Portal to the Future.”

**Where something in the recent past ...
... tells us something about the near future.**

**Momentum IS the
crystal ball we all
hope to find.**



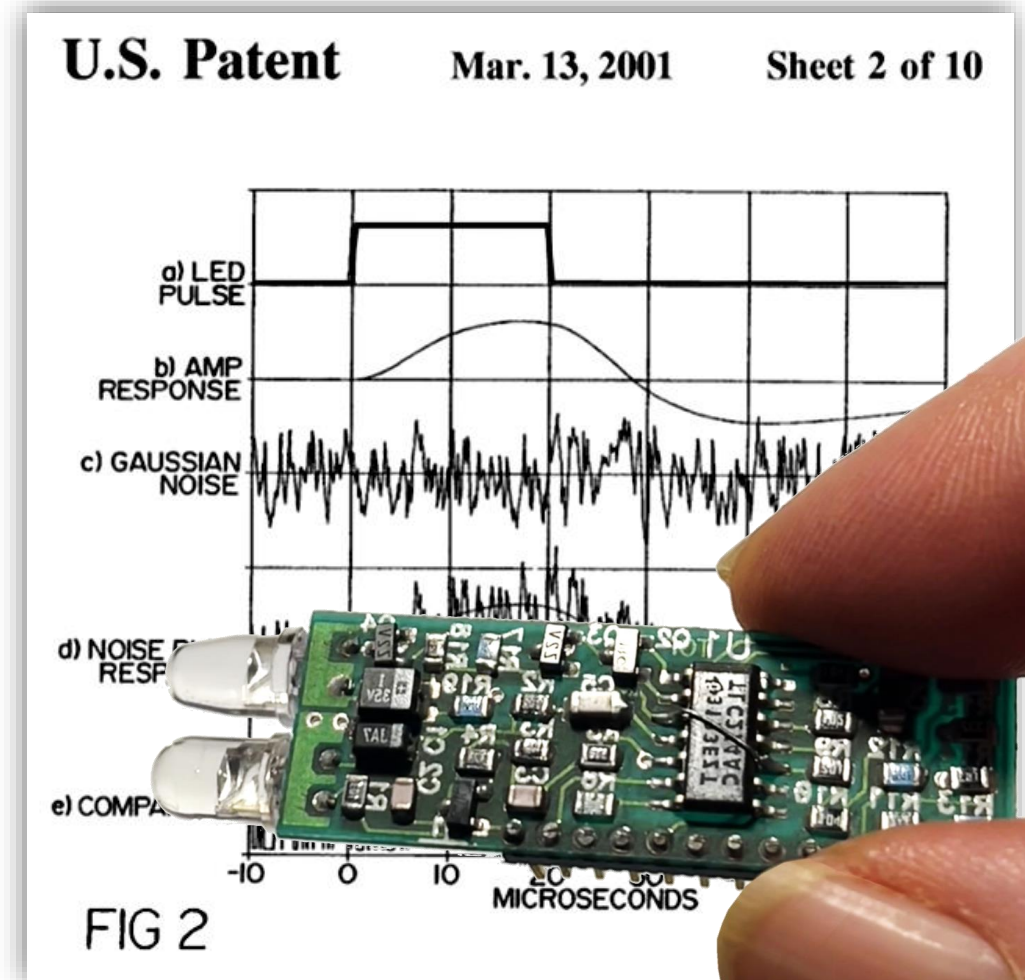
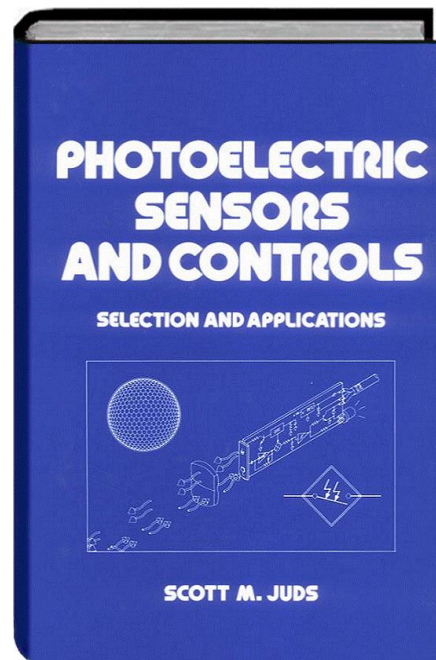


**Reducing the Noise
Is the Whole Game**

Reducing the Noise Is the Whole Game

Signal Processing Theory is Required

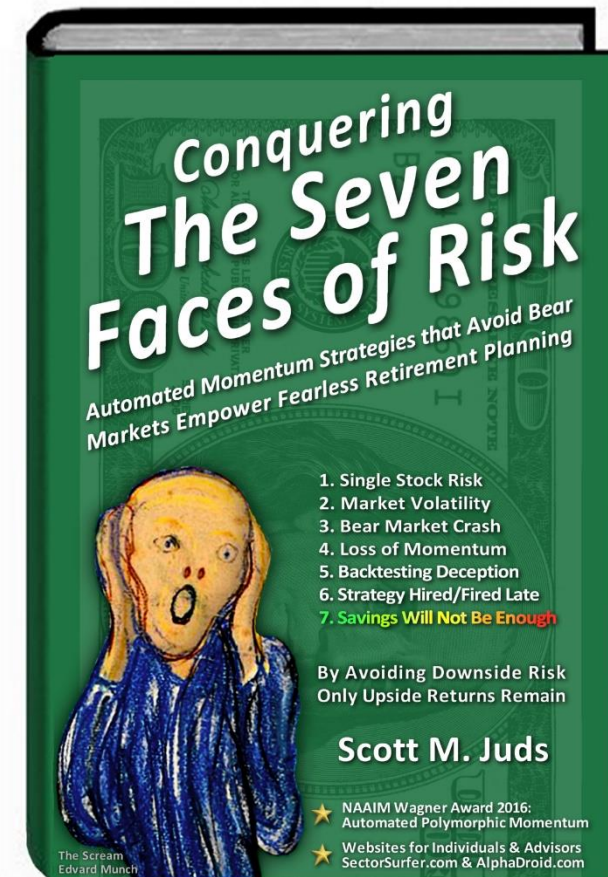
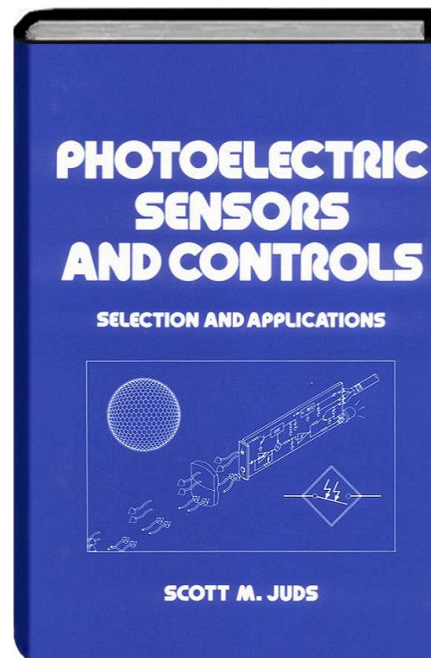
- MSEE from Stanford University
- Over 40 U.S. and foreign patents
- VP Eng. Eaton's optical sensor division



Reducing the Noise Is the Whole Game

Signal Processing Theory is Required

- MSEE from Stanford University
- Over 40 U.S. and foreign patents
- VP Eng. Eaton's optical sensor division



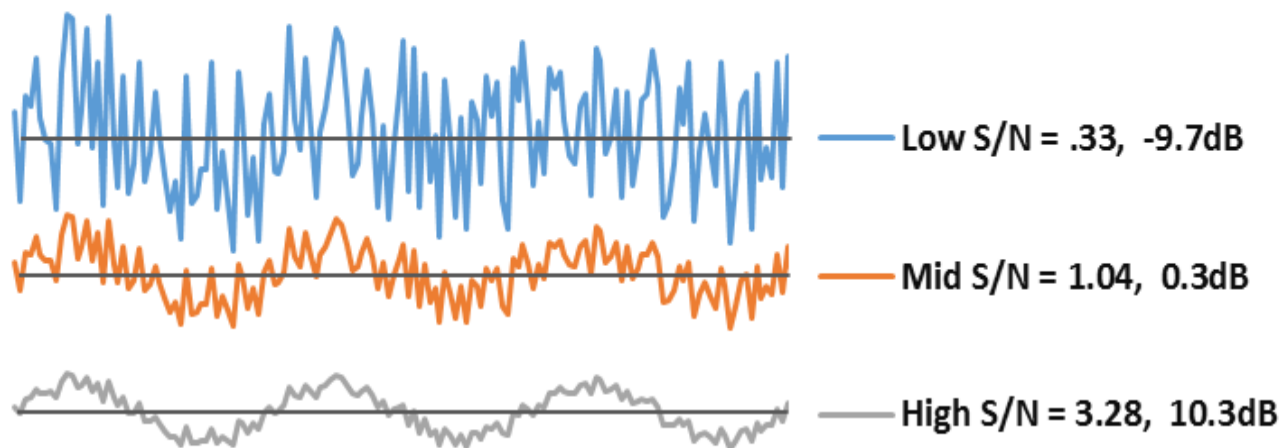


Claude Shannon
National Medal of
Science, 1966

Signal-to-Noise Ratio

**Controls the Probability of
Making the Right Decision**

Signal-to-Noise Ratio Visual Example





Claude Shannon
National Medal of
Science, 1966

Proved

Signal-to-Noise Ratio

**Controls the Probability of
Making the Right Decision**



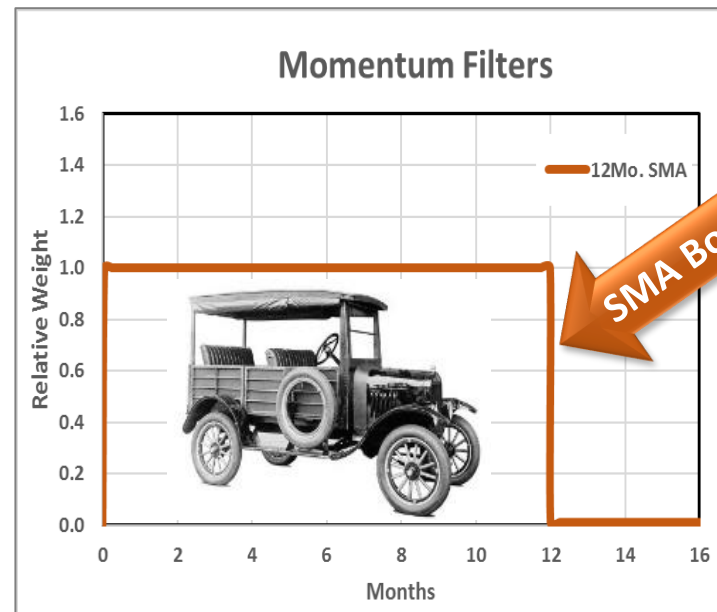


J. H. Van Vleck
Noble Prize, 1977

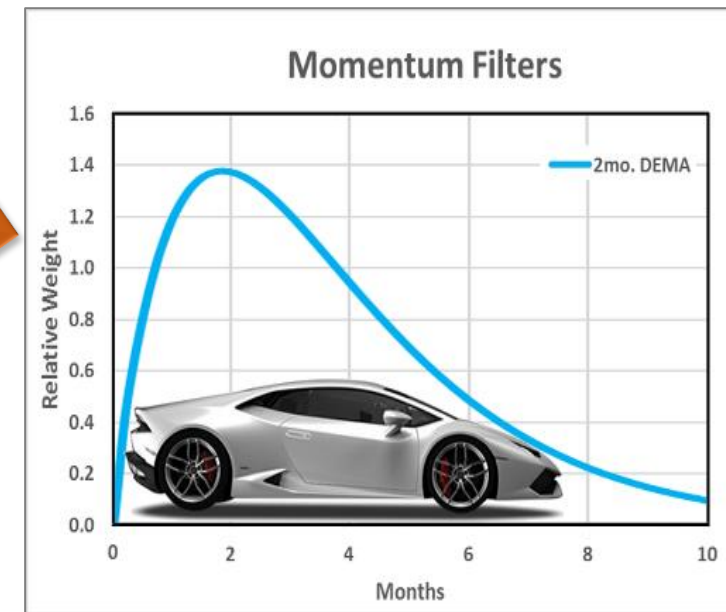
Matched Filter Theory

Design for Optimum Signal-to-Noise Ratio

Think Outside of the Box



Someplace to Start



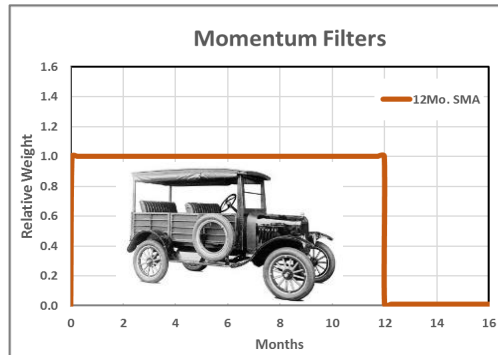
Designed for Performance



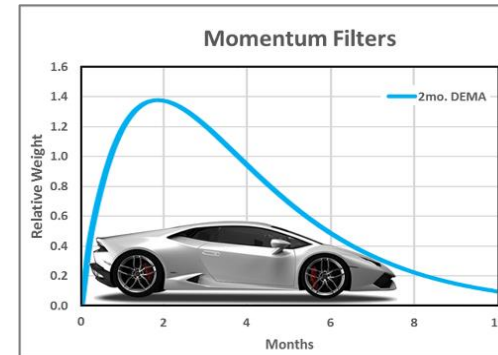


J. H. Van Vleck
Noble Prize, 1977

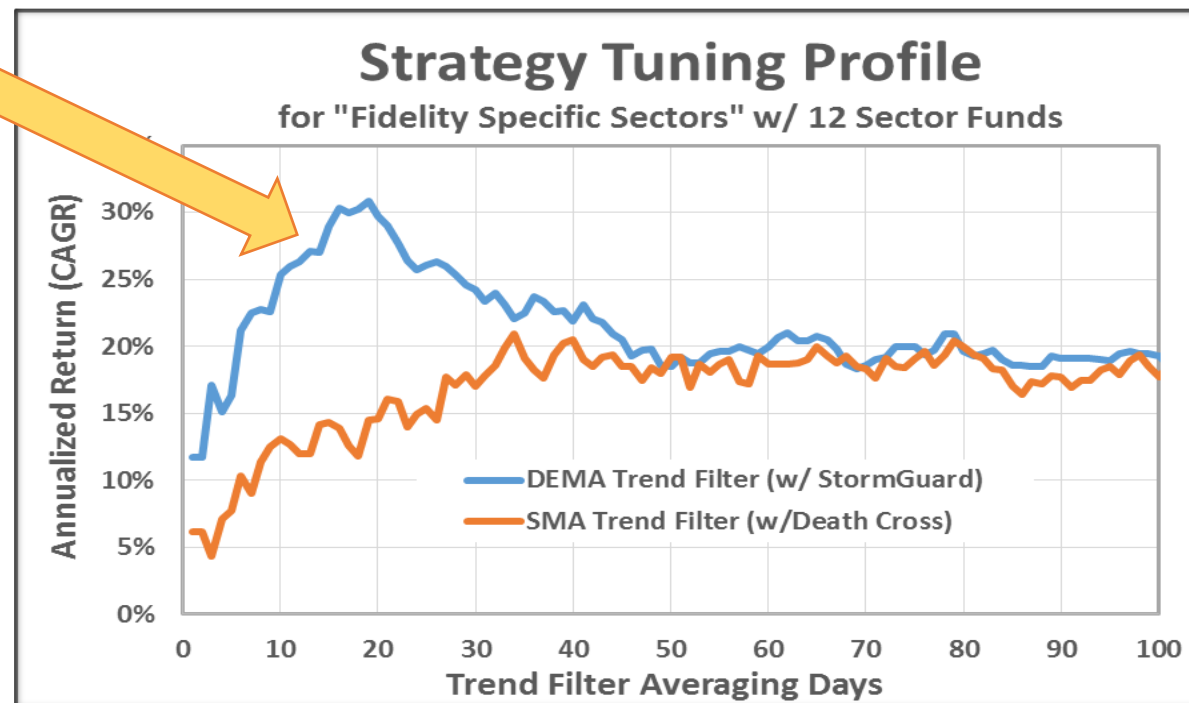
Think Outside of the Box



Someplace to Start

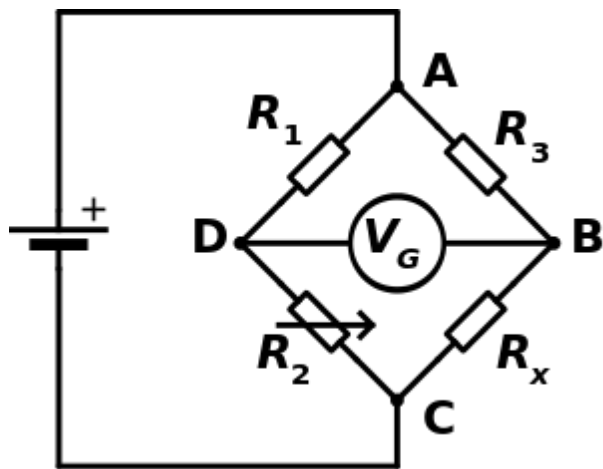


Designed for Performance





Samuel H. Christie
Royal Society 1836

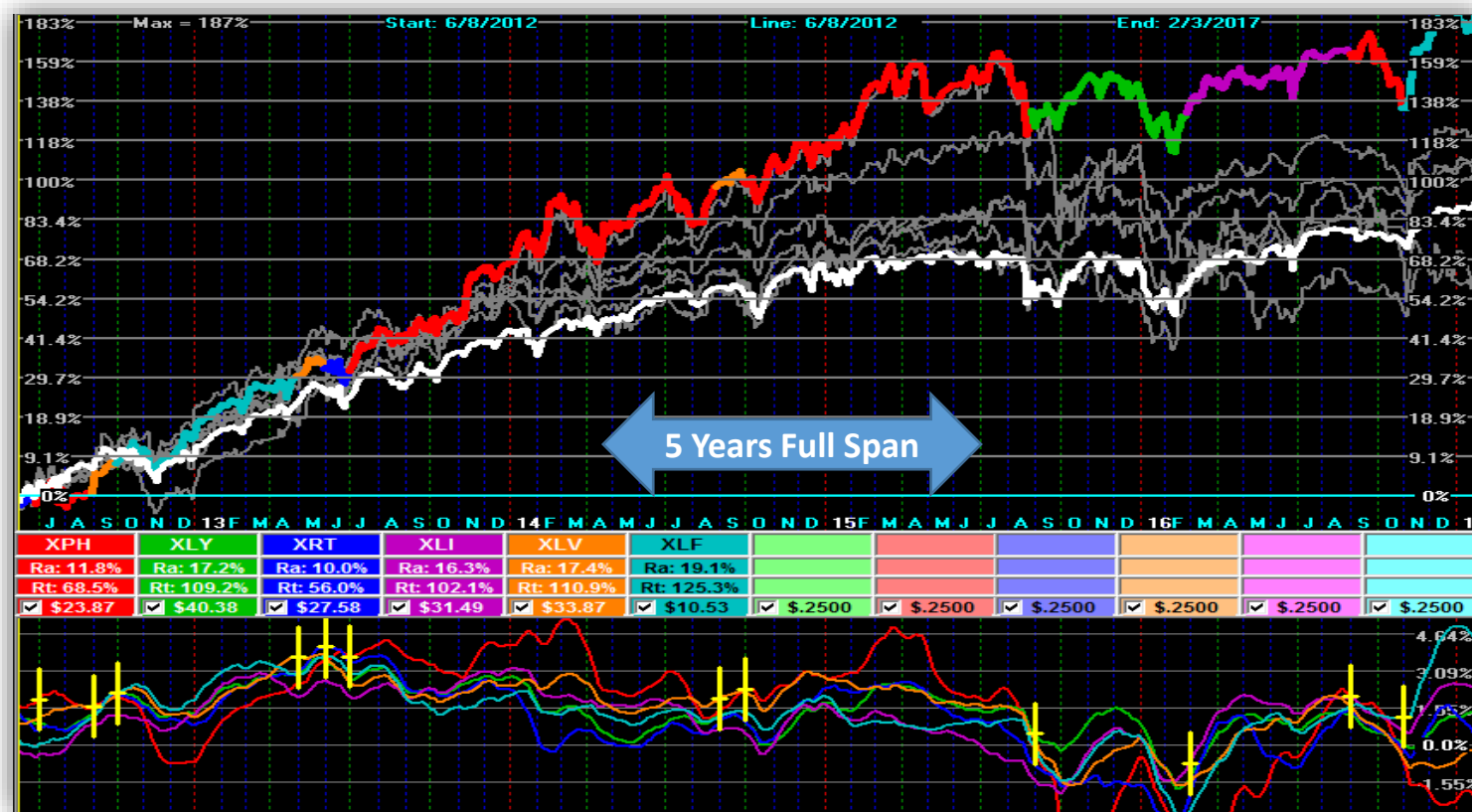


Wheatstone Bridge

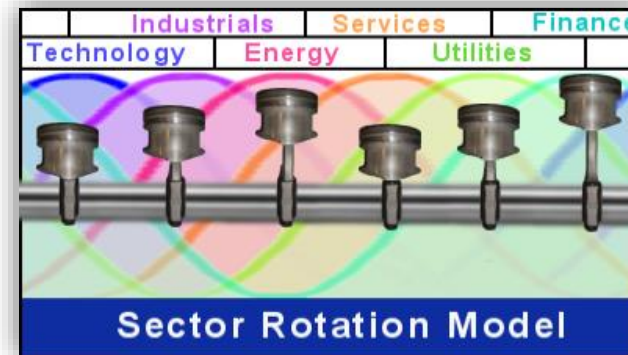
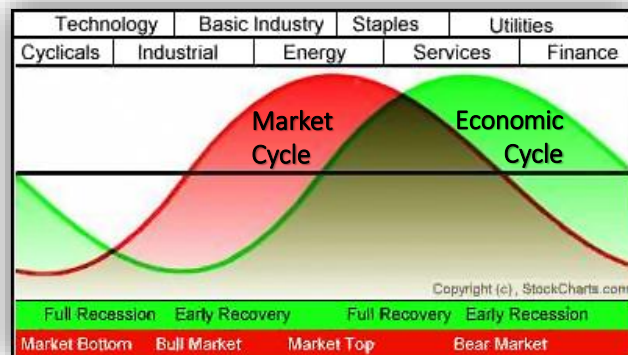
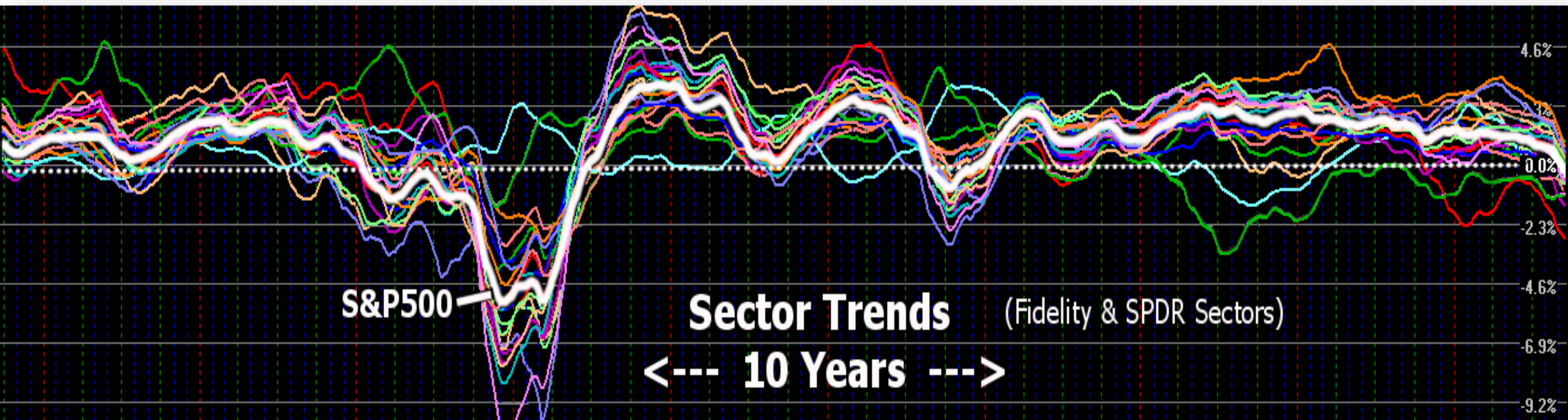
Differential Signal Processing

Removes Common Mode Noise

(Relative Strength)

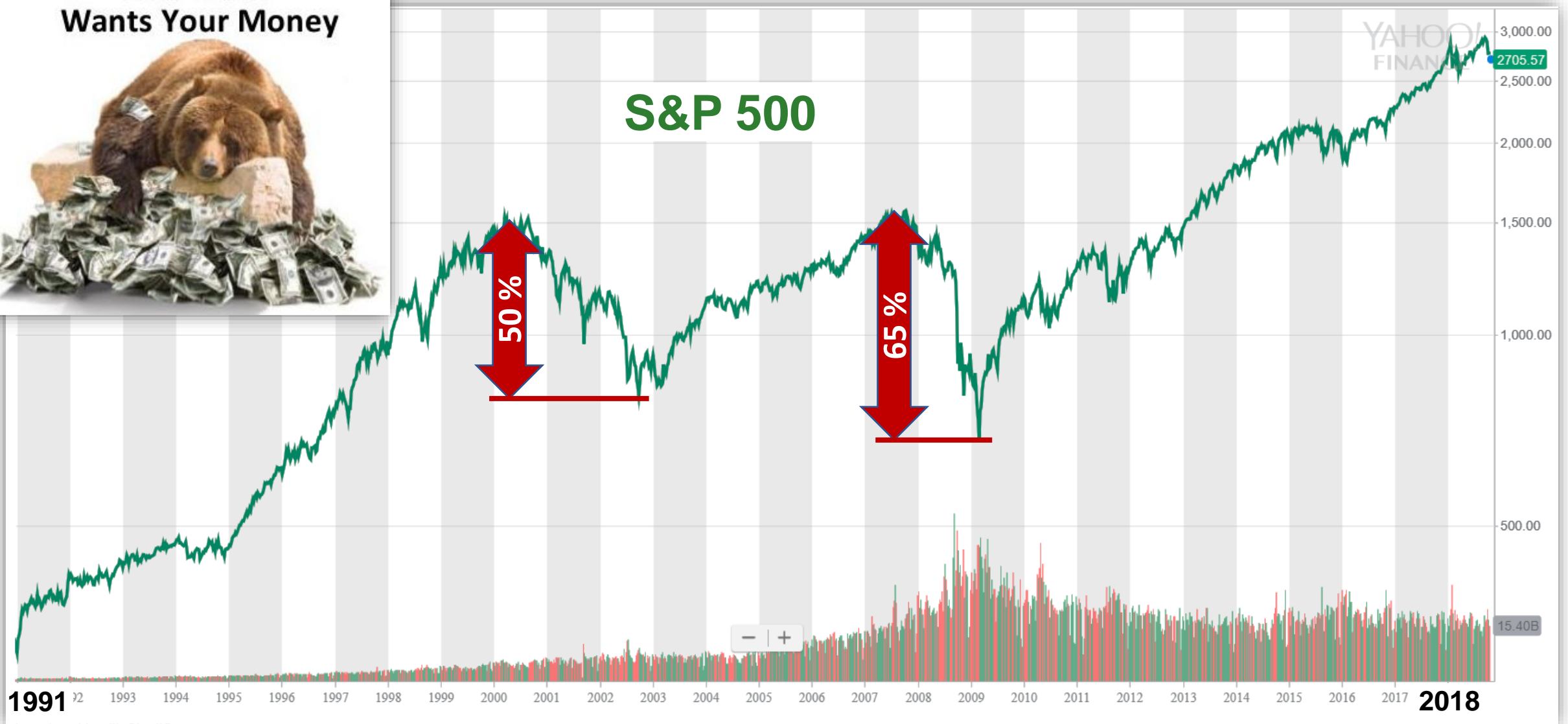


Sectors Provide Power Strokes



The Bear Market Problem

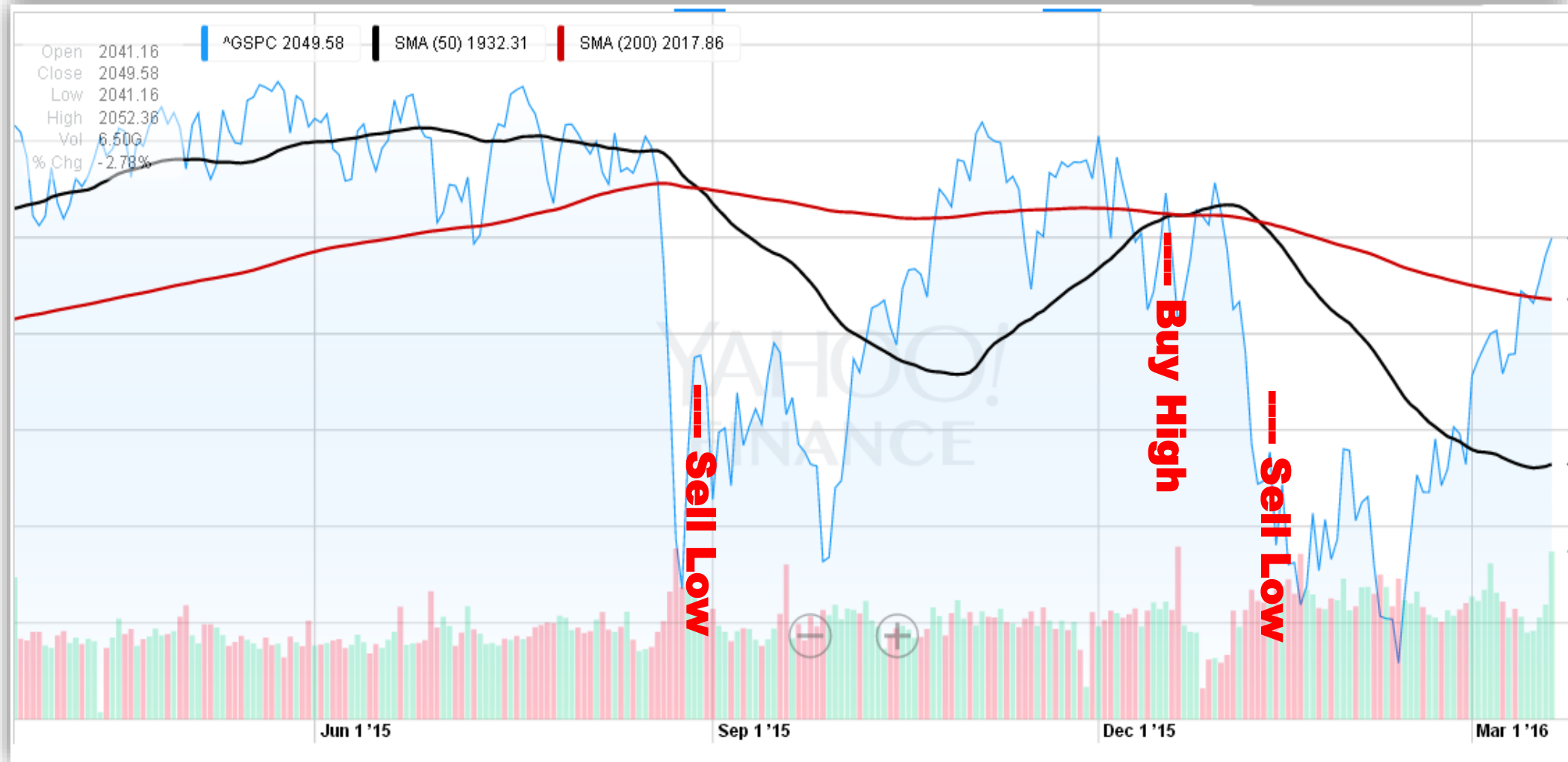
The Bear
Wants Your Money



For Use by Investment Professionals

The Death Cross Problem

50d Moving Average Crosses the 200d Moving Average



StormGuard-Armor

Detect the Onset of Bear Markets

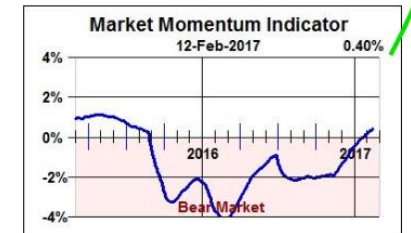
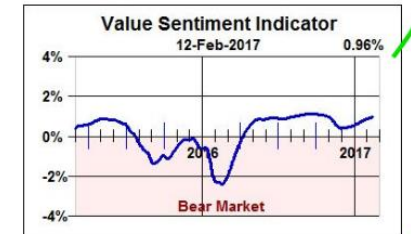
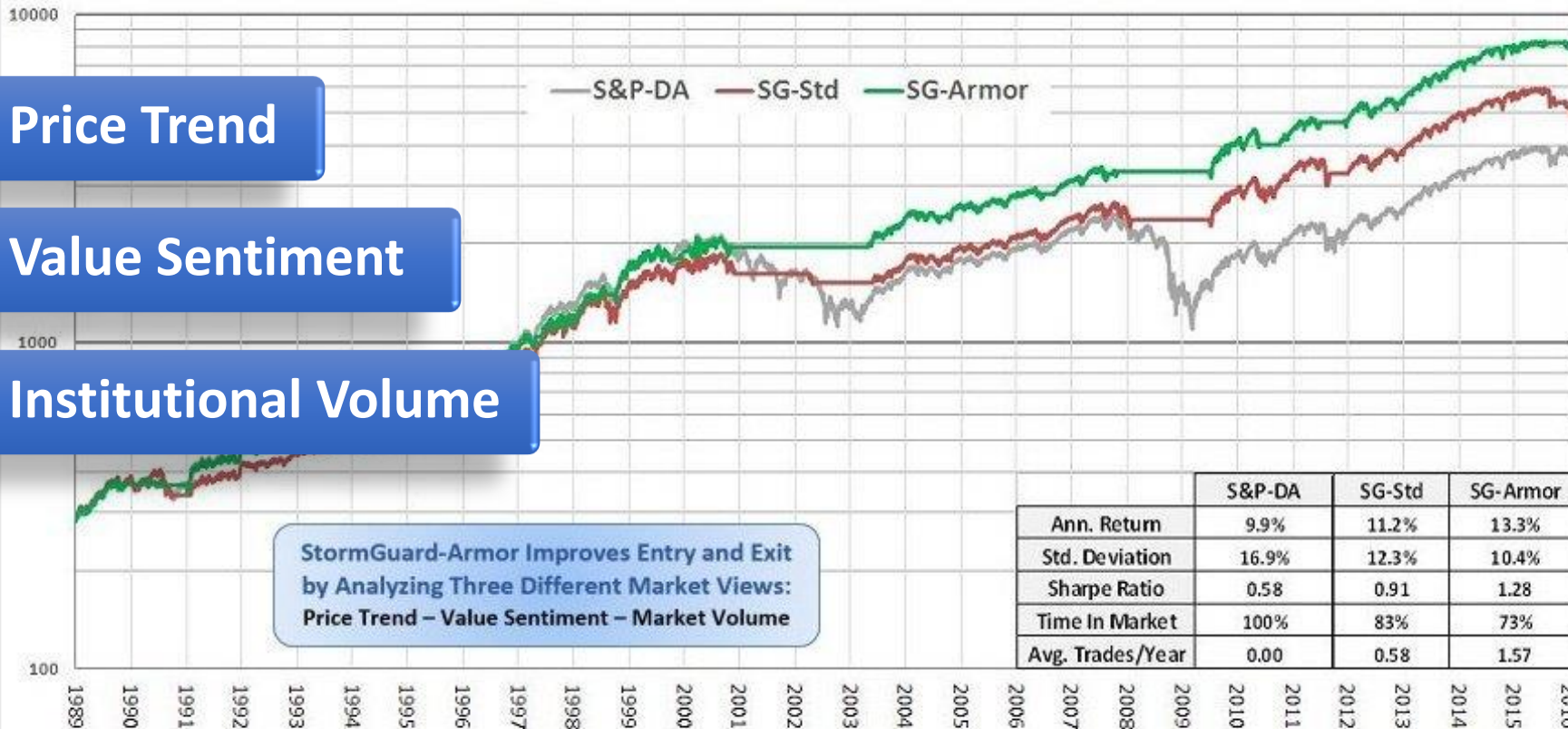
1. Price Trend

2. Value Sentiment

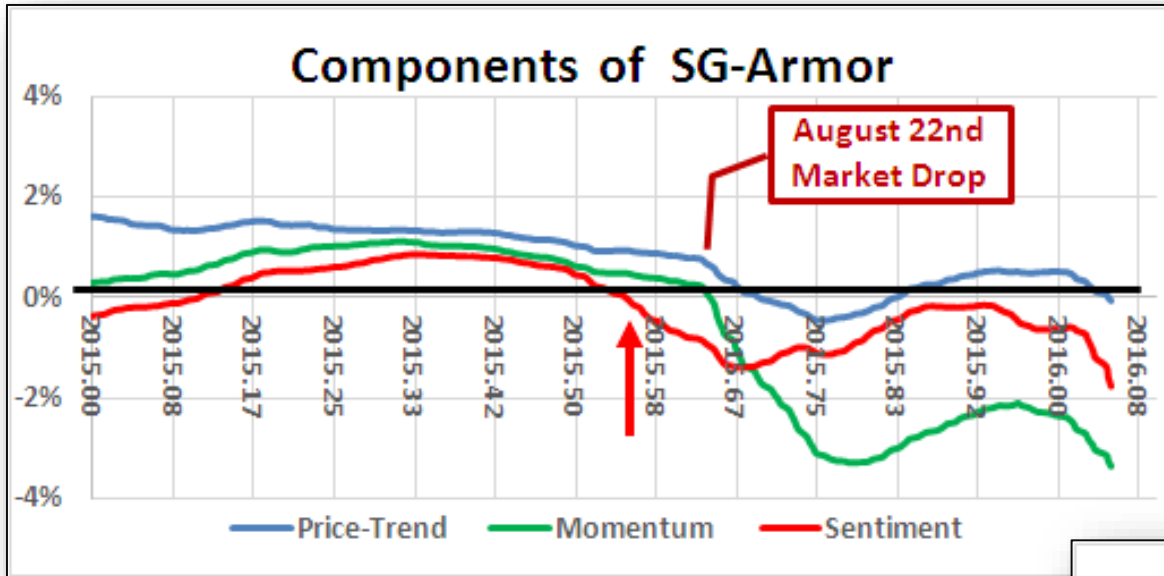
3. Institutional Volume

StormGuard - Armor
Incorporating Price, Highs/Lows and Volume Data
Utilizing Matched Filter Theory, PID Algorithms & Fuzzy Logic

Introduced
March 2016

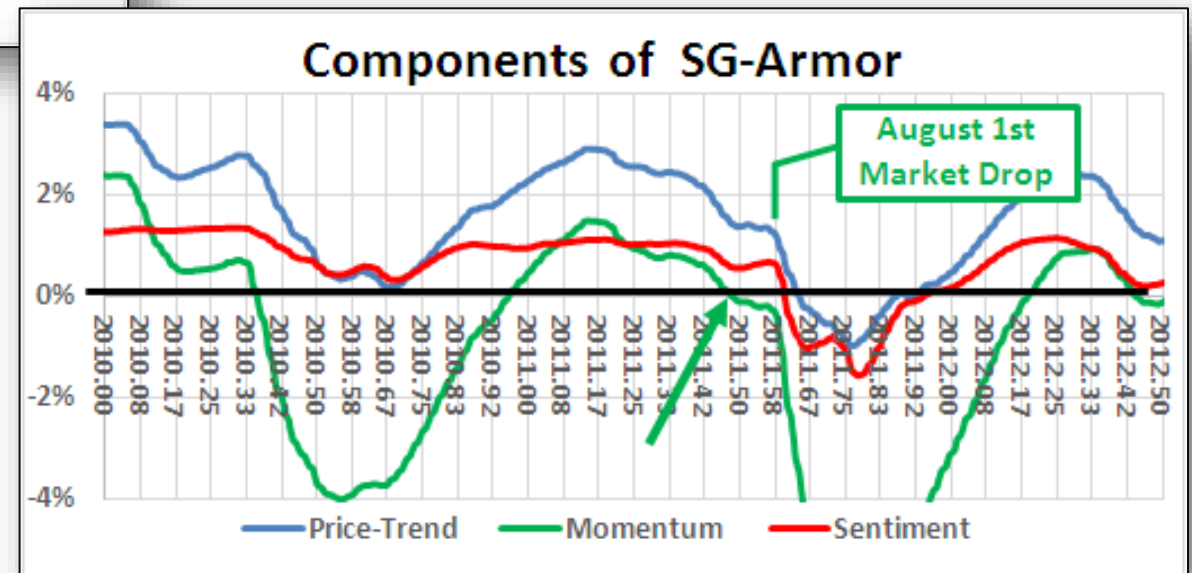


Why is StormGuard-Armor Better?



It Analyses Three Different Kinds of Market Behavior.

It Incorporates Event Detection, not Simply Timing Adjustments.





Merlyn.AI
Unleash the Wizard

Merlyn's Daily Brief

Heat Map, Risk Avoidance, and Portfolio Tools

Coming Soon

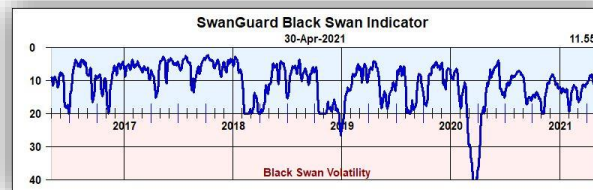
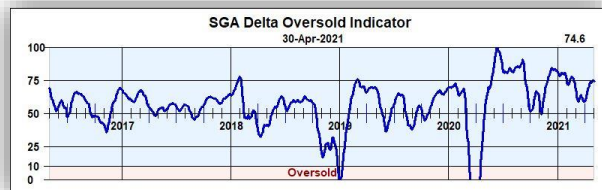
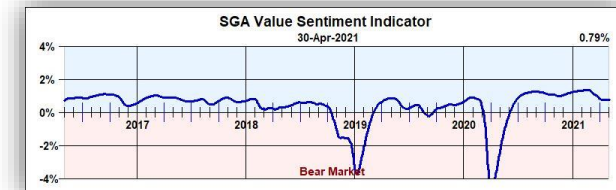
[Merlyn.AI Indexes](#)[Market Heat Map](#)[Risk Avoidance](#)[Bear Strategies](#)[Portfolio Design Tool](#)[Essential Videos](#)[Getting On Board](#)[Print to PDF](#)

Risk Avoidance

Is Superior to Risk Dilution (Diversification)

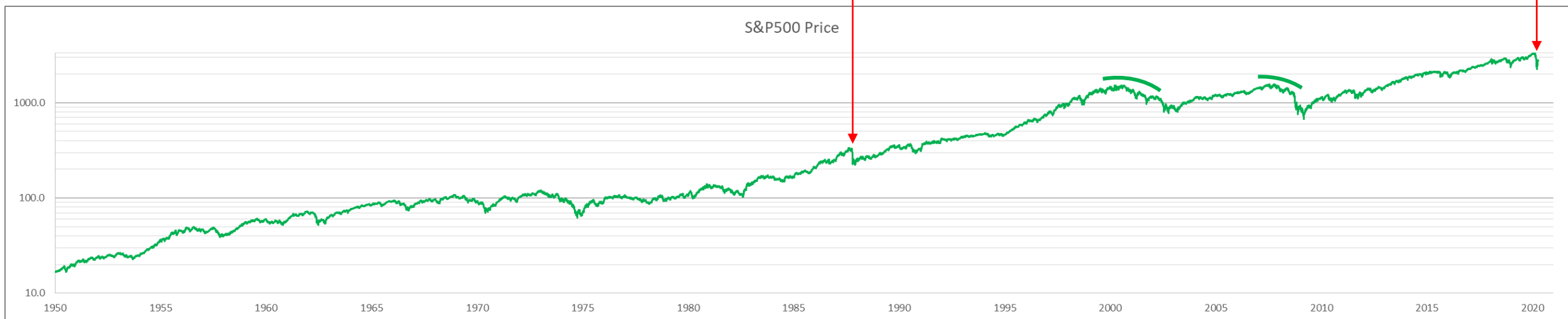
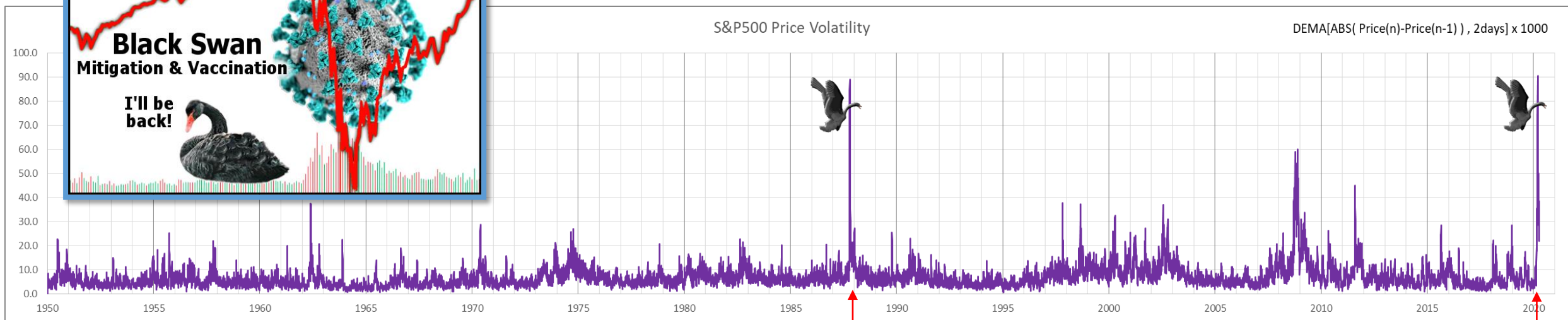
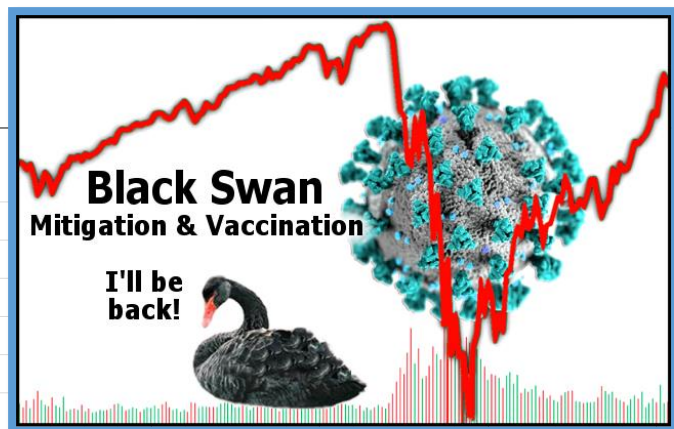


Explore

[A Quick Video Tour](#)[StormGuard-Armor](#)[Black Swan Vaccination](#)[Bear Market Strategies](#)[Disclaimers](#)[Terms of Use](#)[Privacy Policy](#)[Security](#)[About Us](#)[Contact Us](#)

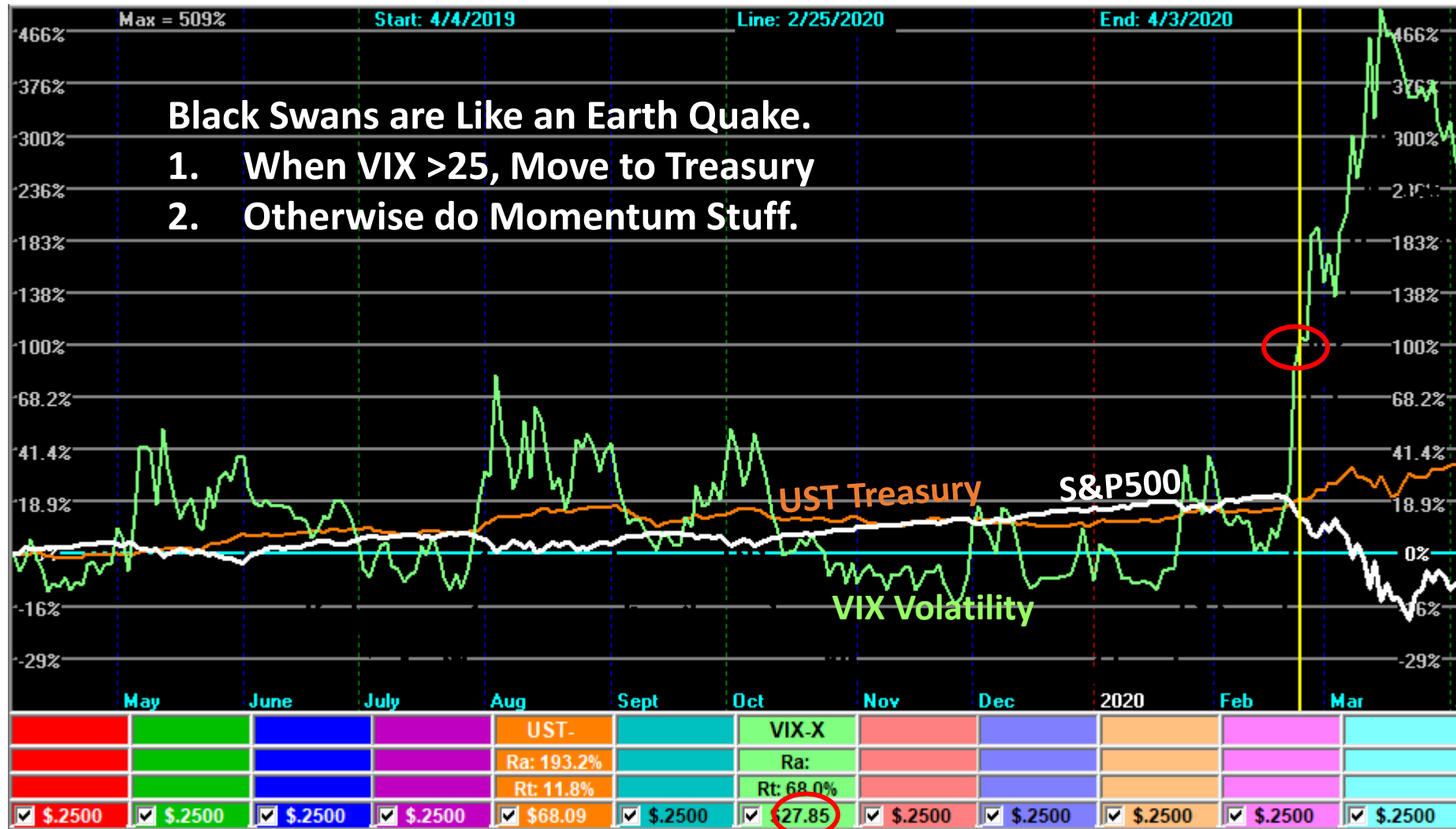
Black Swan Events

January 1950 to April 2020



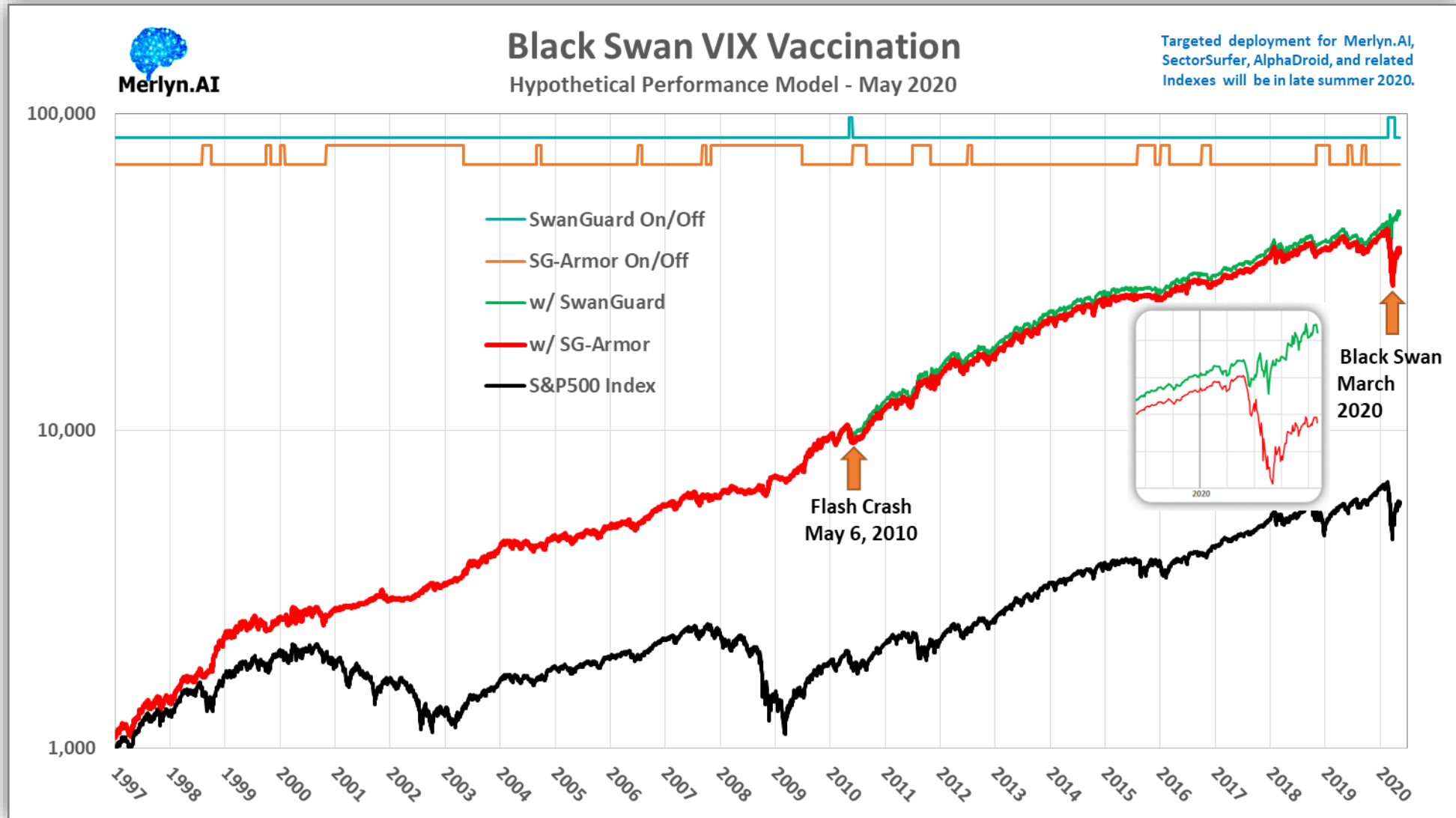
Vaccination Response

Real-Time BS Detection

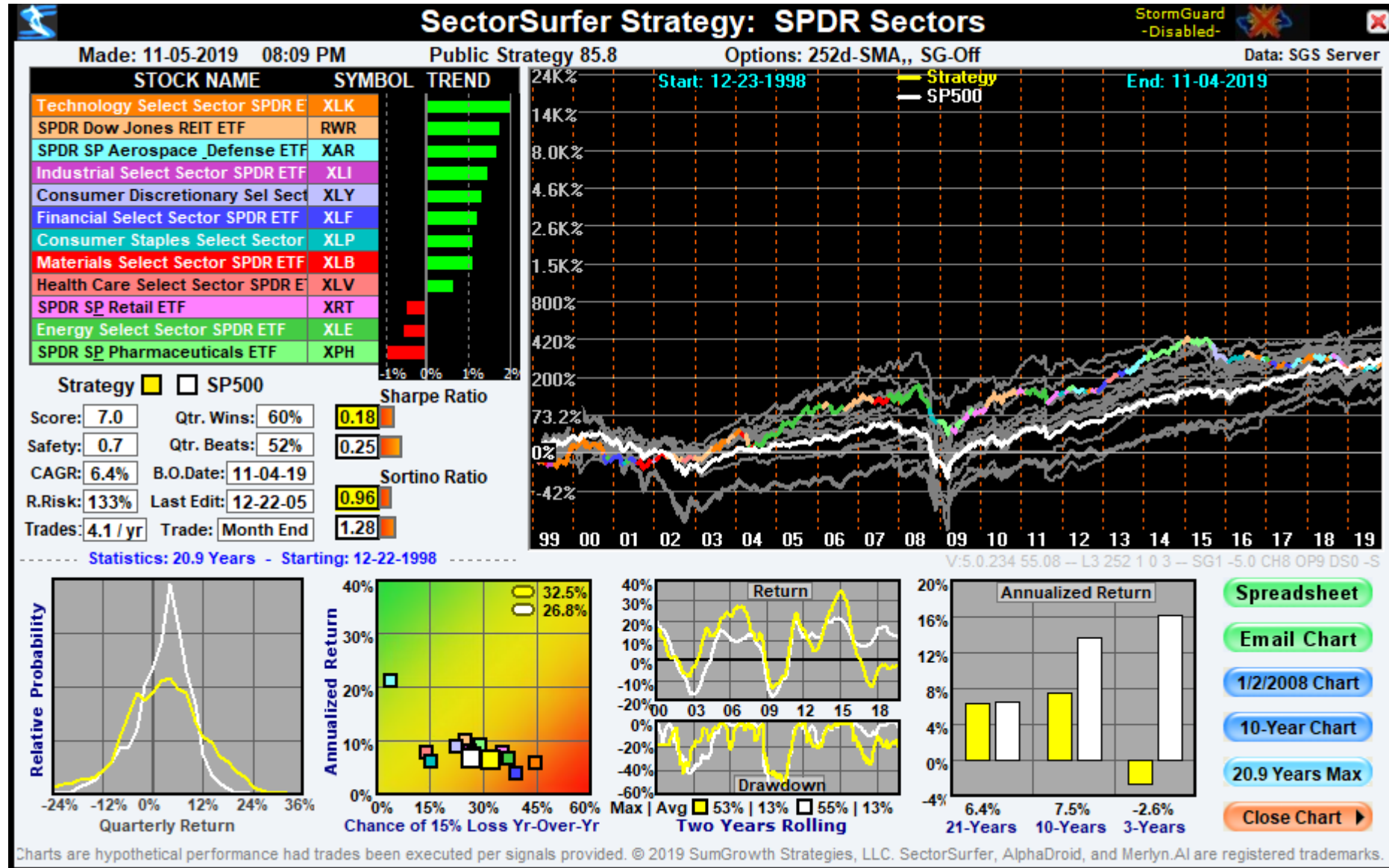


Vaccination Response

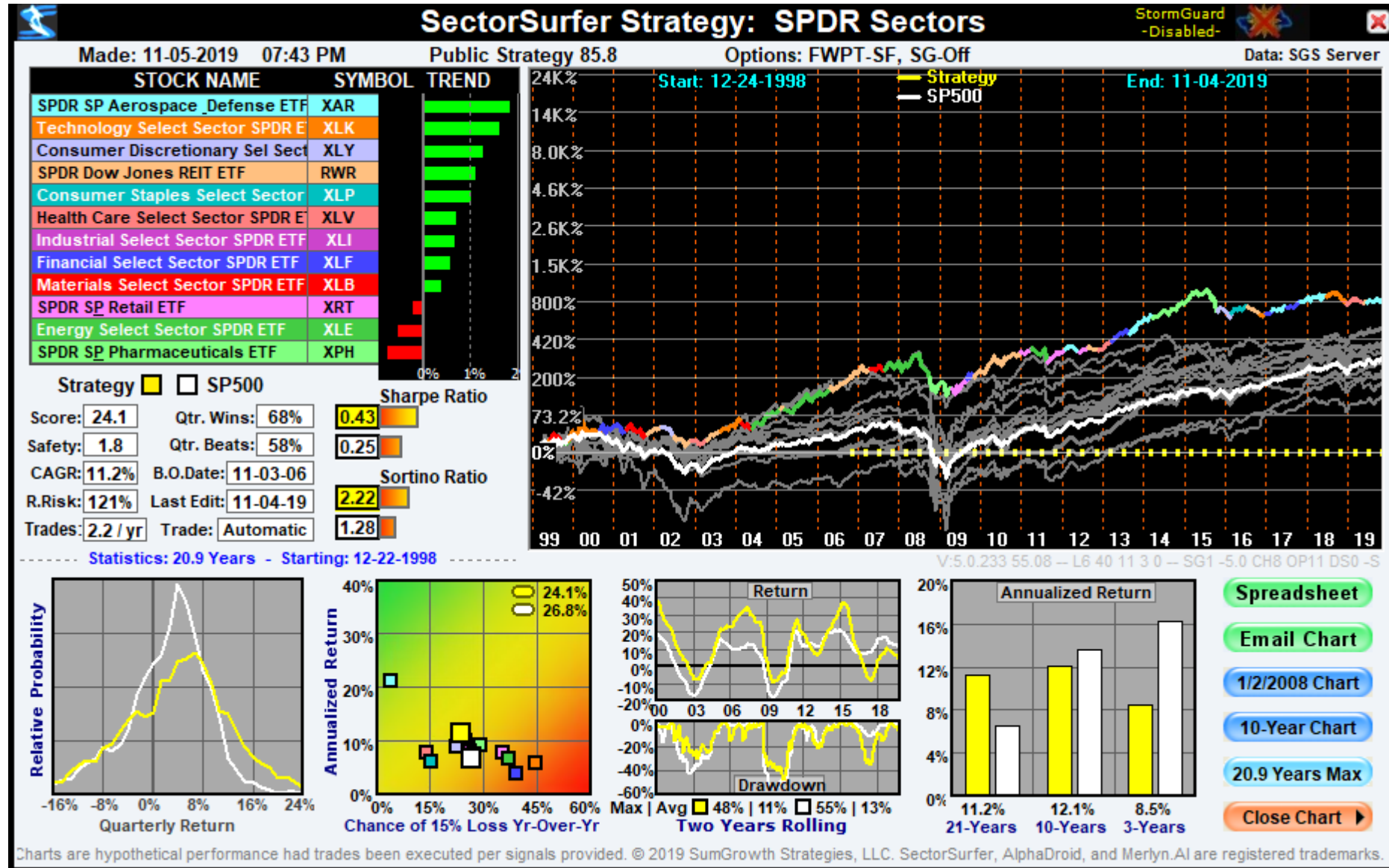
Real-Time BS Detection



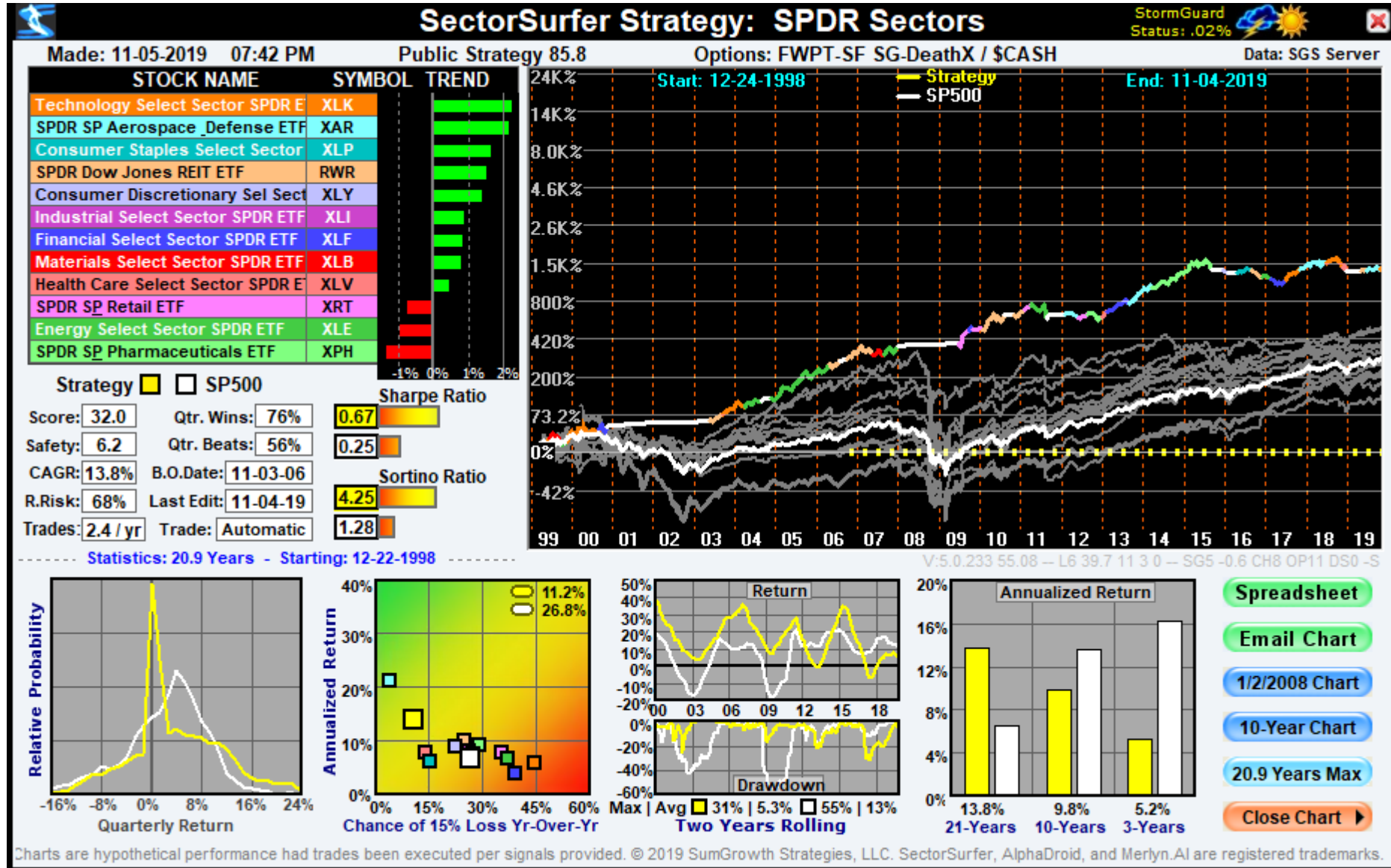
12-Month SMA Sector Strategy



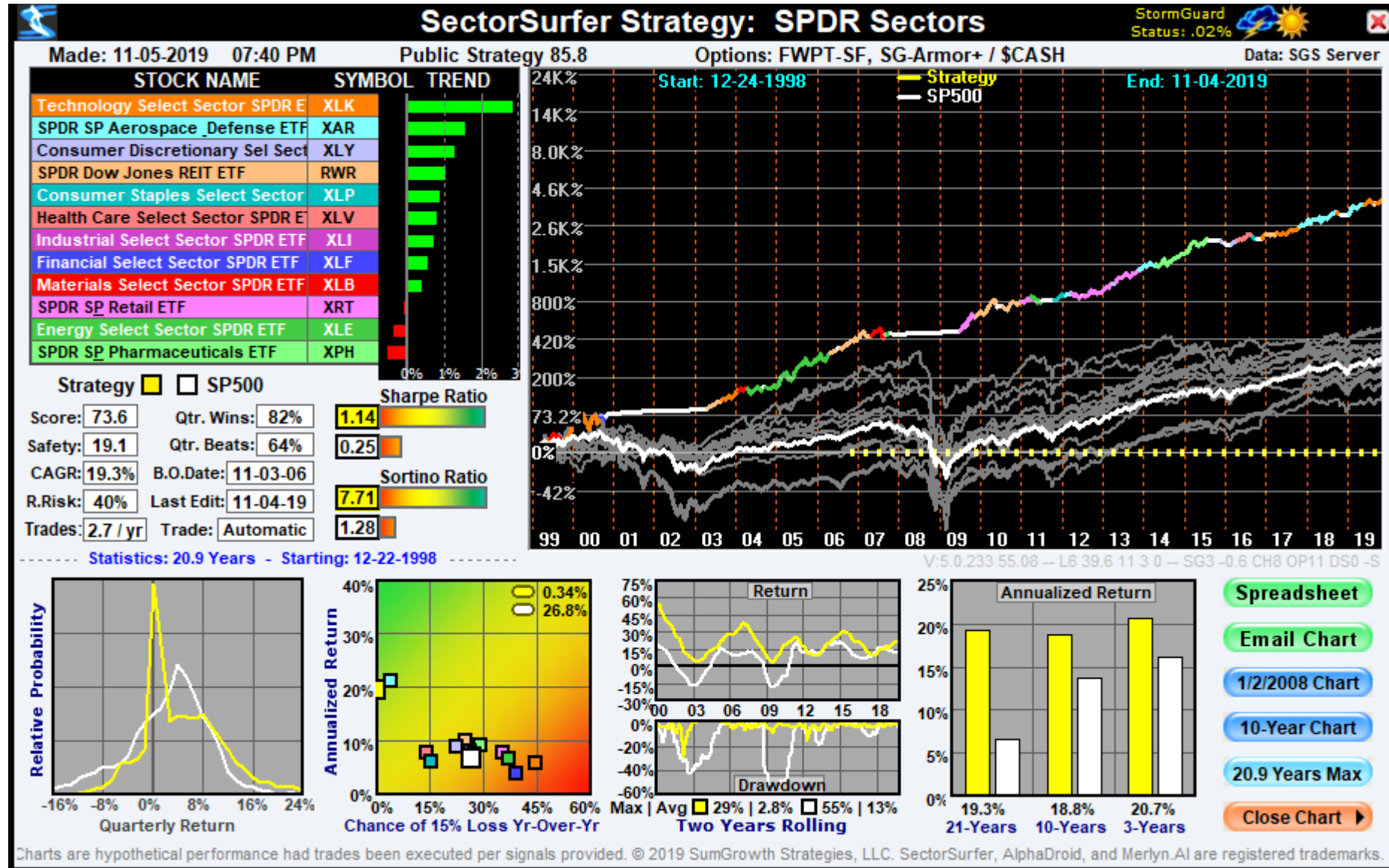
FWPT DEMA Strategy in painted path.



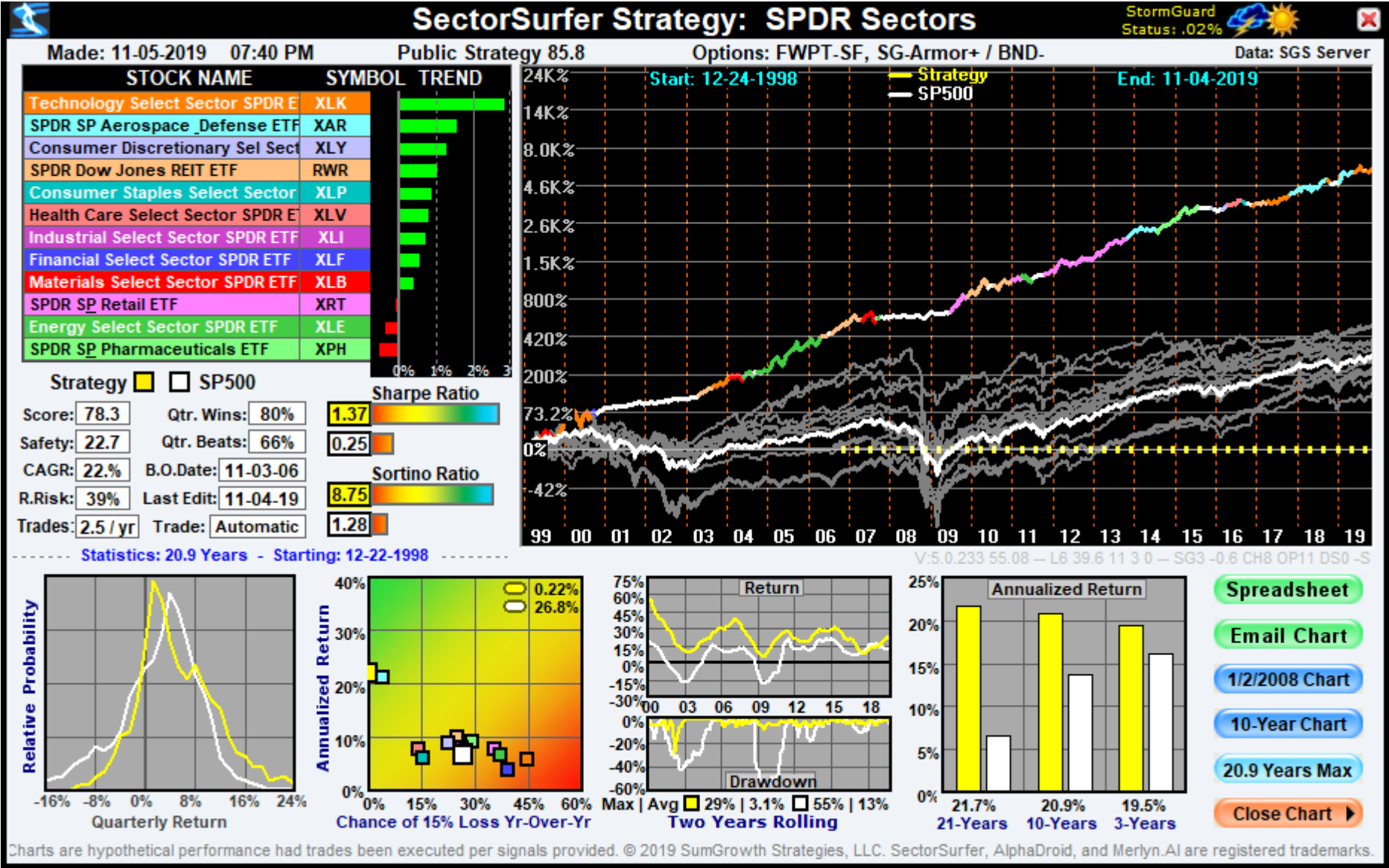
FWPT DEMA Strategy w/ Death Cross to Cash



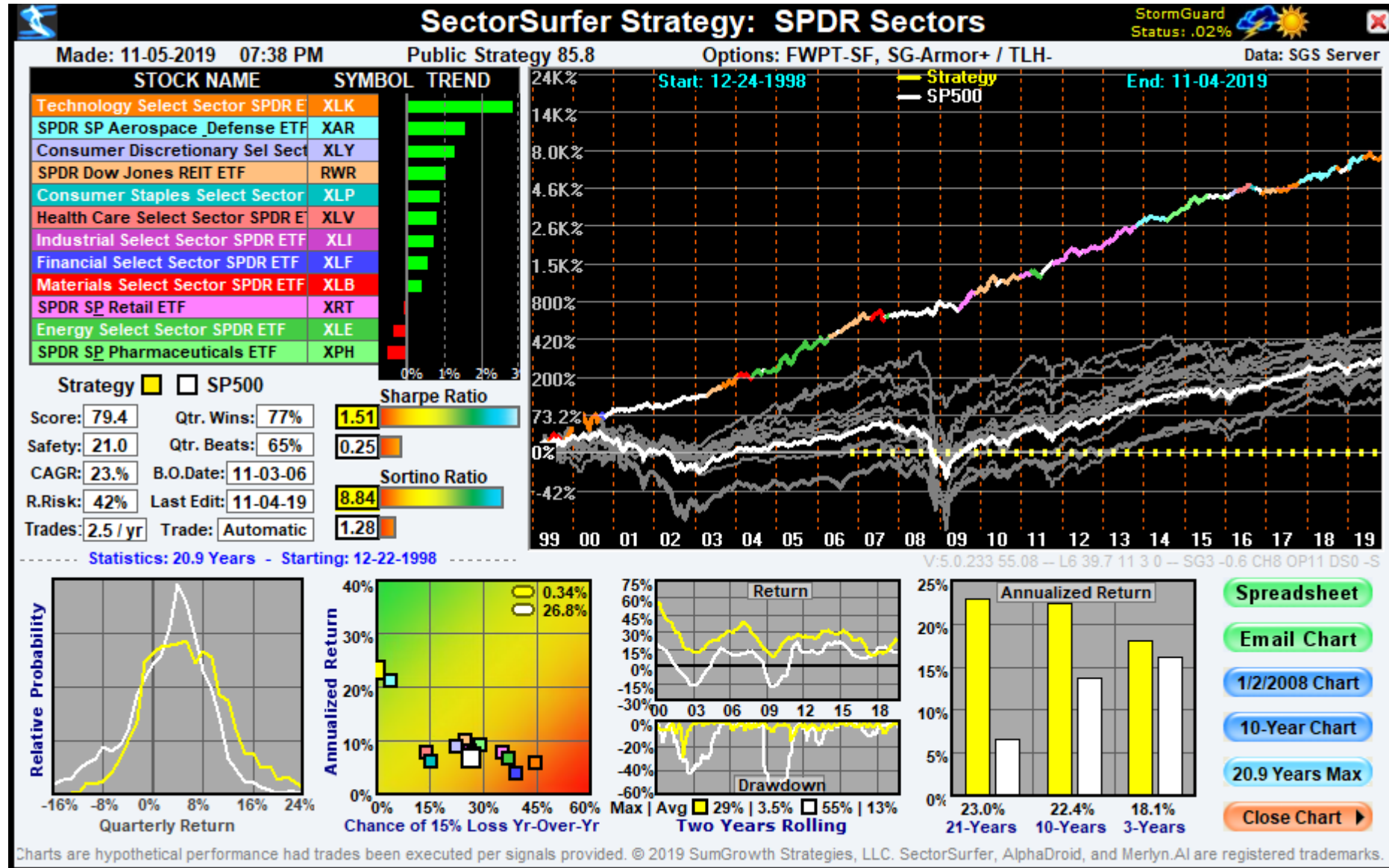
FWPT DEMA Strategy w/ AG-Armor to Cash



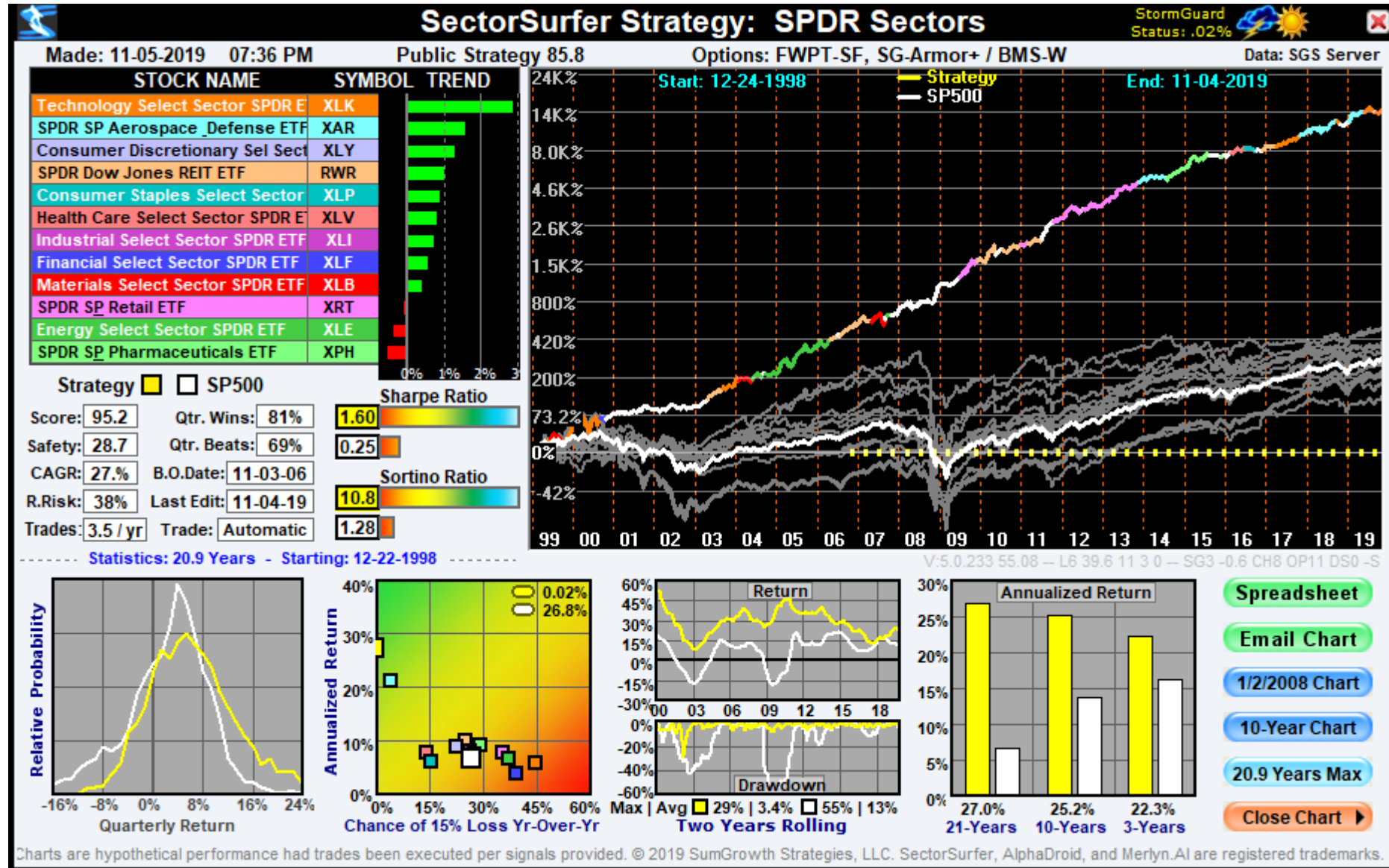
FWPT DEMA Strategy w/ AG-Armor to BND



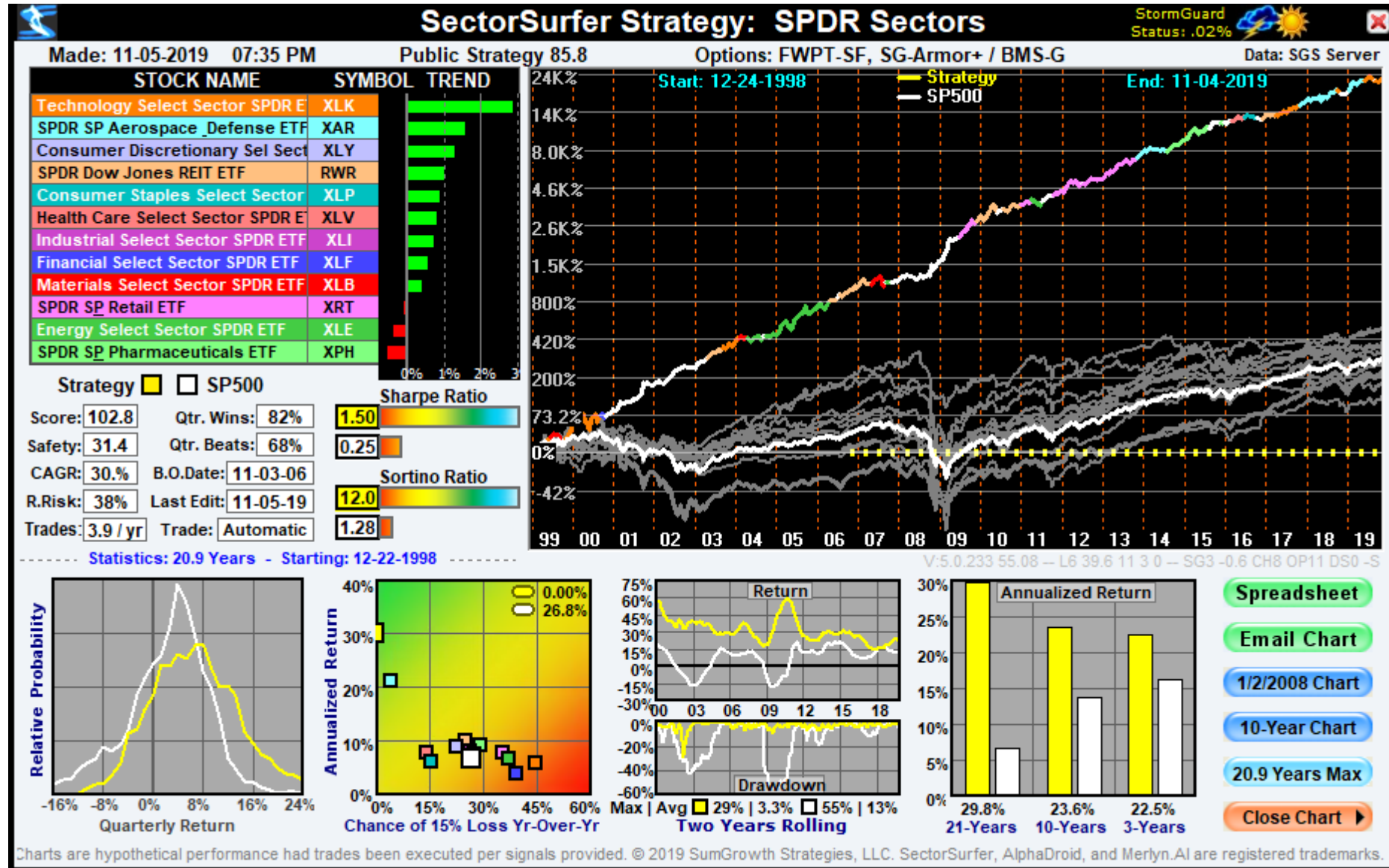
FWPT DEMA Strategy w/ AG-Armor to TLH



FWPT DEMA Strategy w/ AG-Armor to BMS-W



FWPT DEMA Strategy w/ AG-Armor to BMS-G





Eugene Fama
Nobel Prize, 2013

J. H. Van Vleck
Nobel Prize, 1977

Claude Shannon
National Medal
of Science, 1966

Samuel H. Christie
Royal Society 1836

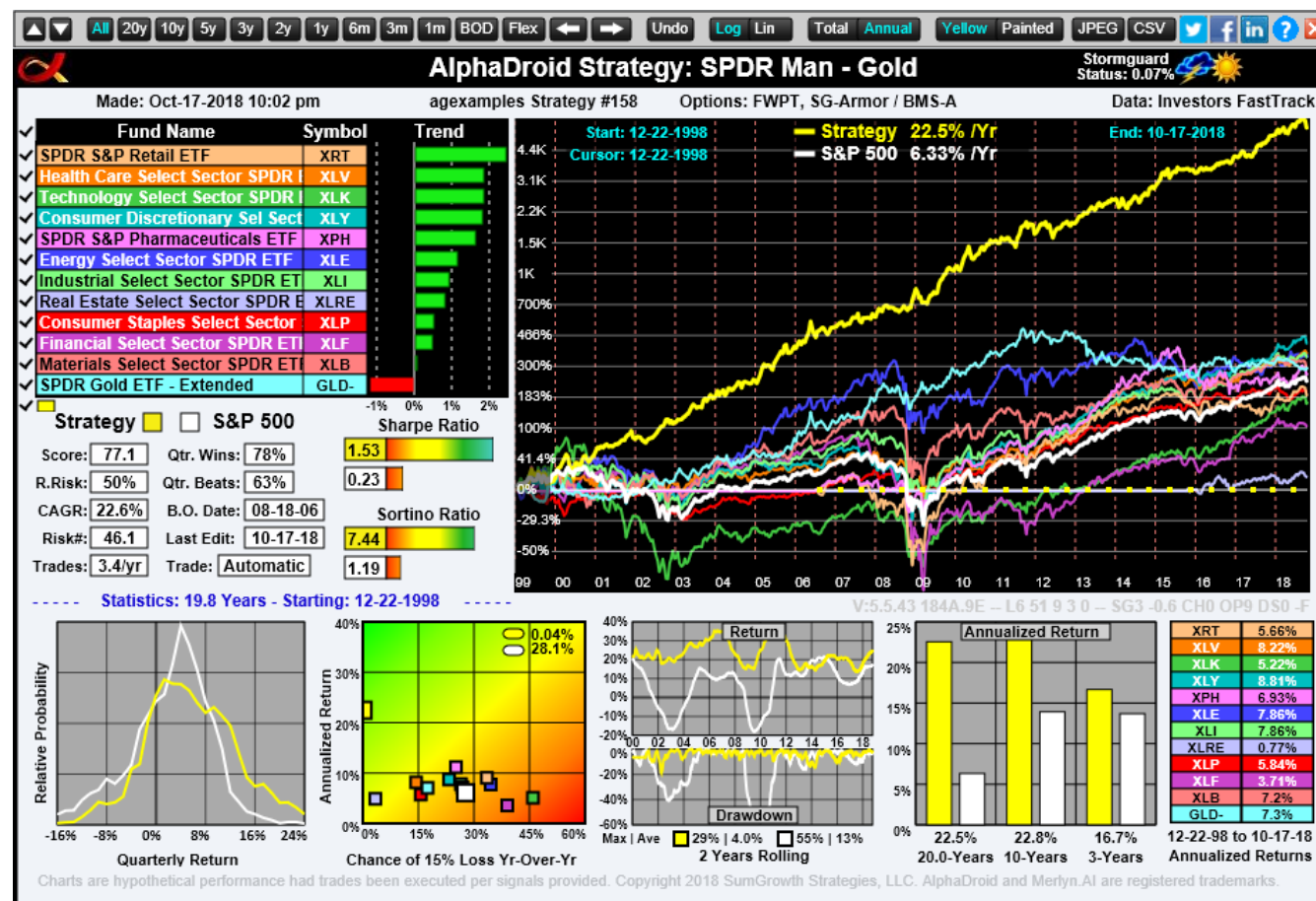
Daniel Kahneman
Nobel Prize, 2002

Amos Tversky
Stanford University

Narasimhan Jegadeesh
Emory University

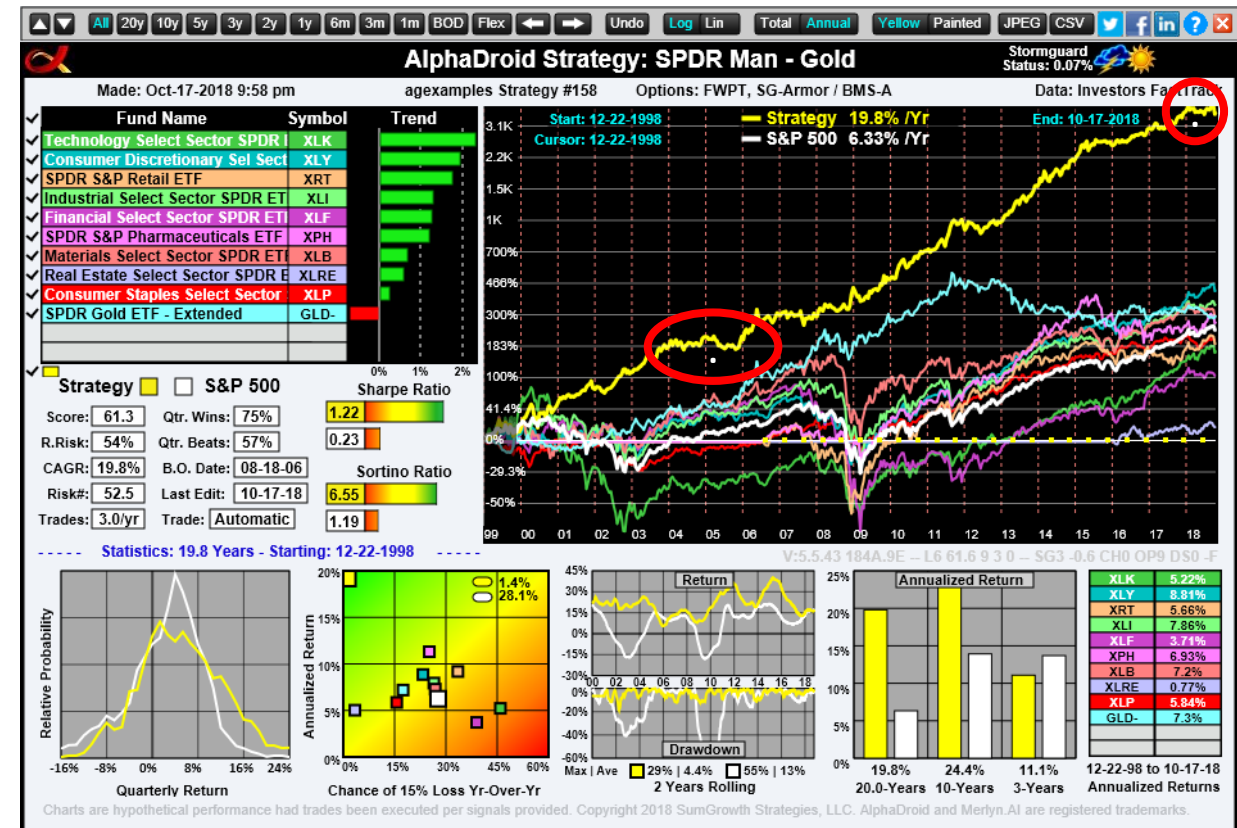
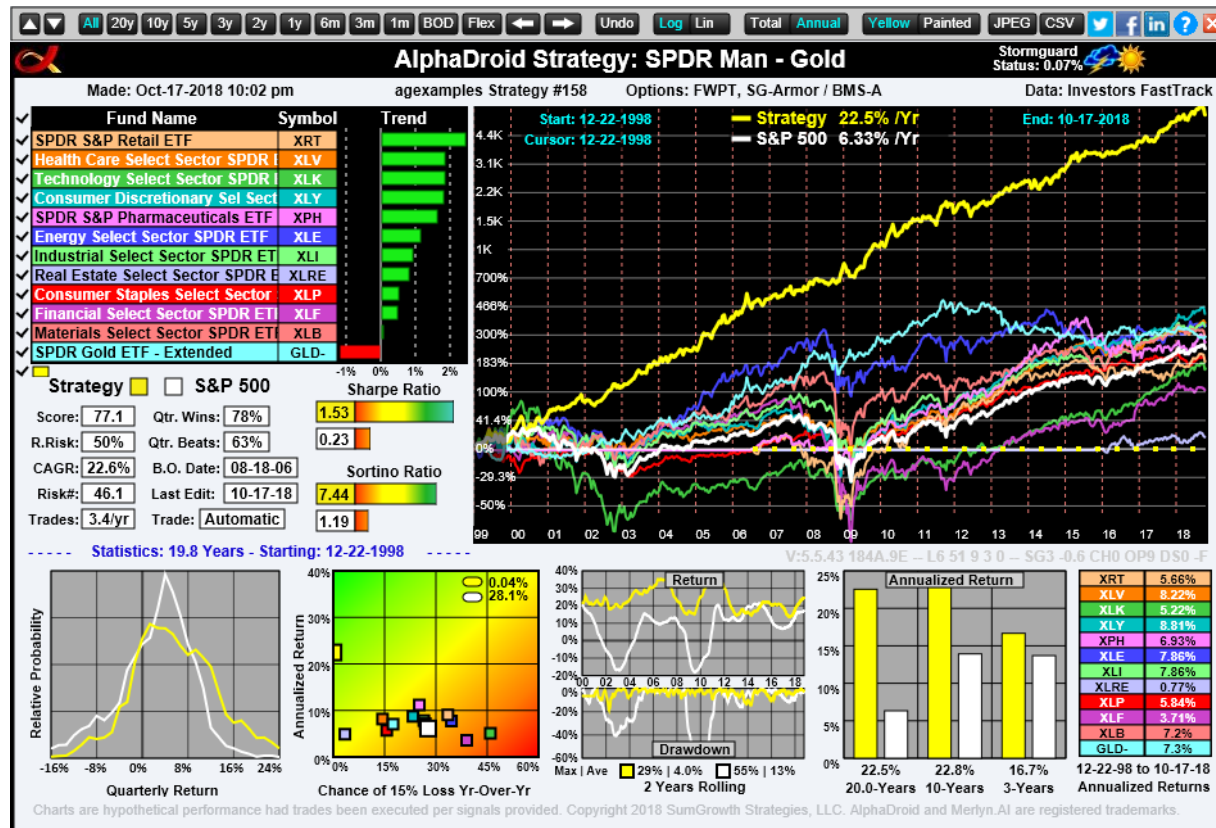
Sheridan Titman
U. of Texas, Austin

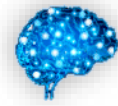
These Guys
Got us Here
Is There More?



What About Selection Bias?

Who Needs XLV-Healthcare and XLE-Energy?

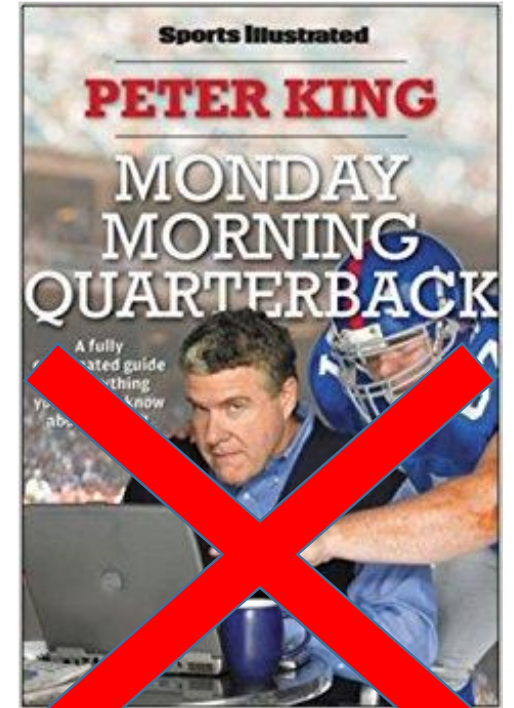
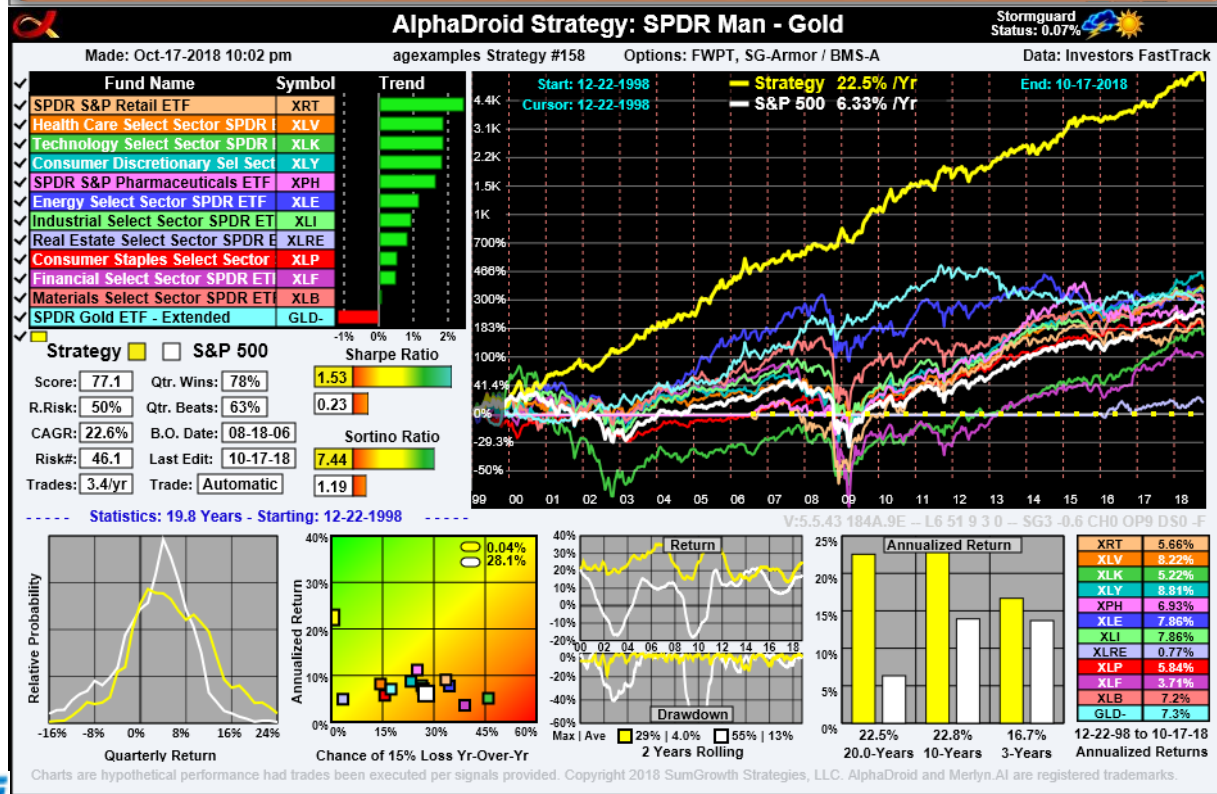




Merlyn.AI

Is a Genetic Algorithm Layered on Top of a Strategy

Genetic Algorithm on Top



Why?

To Evolve its Set of Funds Each Month

Why?

To Remove Hindsight Selection Bias

Artificial Intelligence Algorithms

Types of machine learning algorithms[edit]

- [Almeida–Pineda recurrent backpropagation](#)
- [ALOPEX](#)
- [Backpropagation](#)
- [Bootstrap aggregating](#)
- [CN2 algorithm](#)
- [Constructing skill trees](#)
- [Dehaene–Changeux model](#)
- [Diffusion map](#)
- [Dominance-based rough set approach](#)
- [Dynamic time warping](#)
- [Error-driven learning](#)
- [Evolutionary multimodal optimization](#)
- [Expectation–maximization algorithm](#)
- [FastICA](#)
- [Forward–backward algorithm](#)
- [GeneRec](#)
- [Genetic Algorithm for Rule Set Production](#)
- [Growing self-organizing map](#)
- [HEXQ](#)
- [Hyper basis function network](#)
- [IDistance](#)
- [K-nearest neighbors algorithm](#)
- [Kernel methods for vector output](#)
- [Kernel principal component analysis](#)
- [Leabra](#)
- [Linde–Buzo–Gray algorithm](#)
- [Local outlier factor](#)
- [Logic learning machine](#)
- [LogitBoost](#)
- [Manifold alignment](#)
- [Minimum redundancy feature selection](#)
- [Mixture of experts](#)
- [Multiple kernel learning](#)
- [Non-negative matrix factorization](#)
- [Online machine learning](#)
- [Out-of-bag error](#)
- [Prefrontal cortex basal ganglia working memory](#)
- [PVLV](#)
- [Q-learning](#)
- [Quadratic unconstrained binary optimization](#)
- [Query-level feature](#)
- [Quickprop](#)
- [Radial basis function network](#)
- [Randomized weighted majority algorithm](#)

- [Reinforcement learning](#)
- [Repeated incremental pruning to produce error reduction \(RIPPER\)](#)
- [Rprop](#)
- [Rule-based machine learning](#)
- [Skill chaining](#)
- [Sparse PCA](#)
- [State–action–reward–state–action](#)
- [Stochastic gradient descent](#)
- [Structured kNN](#)
- [T-distributed stochastic neighbor embedding](#)
- [Temporal difference learning](#)
- [Wake-sleep algorithm](#)
- [Weighted majority algorithm \(machine I](#)

Supervised learning

- [AODE](#)
- [Artificial neural network](#)
- [Association rule learning](#) algorithms
 - [Apriori algorithm](#)
 - [Eclat algorithm](#)
- [Case-based reasoning](#)
- [Gaussian process regression](#)
- [Gene expression programming](#)
- [Group method of data handling \(GMDH\)](#)
- [Inductive logic programming](#)
- [Instance-based learning](#)
- [Lazy learning](#)
- [Learning Automata](#)
- [Learning Vector Quantization](#)
- [Logistic Model Tree](#)
- [Minimum message length](#) (decision trees, decision graphs, etc.)
 - [Nearest Neighbor Algorithm](#)
 - [Analogical modeling](#)
- [Probably approximately correct learning \(PAC\) learning](#)
- [Ripple down rules](#), a knowledge acquisition methodology
- [Symbolic machine learning algorithms](#)
- [Support vector machines](#)
- [Random Forests](#)
- [Ensembles of classifiers](#)
 - [Bootstrap aggregating](#) (bagging)
 - [Boosting \(meta-algorithm\)](#)
- [Ordinal classification](#)
- [Information fuzzy networks \(IFN\)](#)

Bayesian[edit]

- [Bayesian statistics](#)
- [Bayesian knowledge base](#)
- [Naive Bayes](#)
- [Gaussian Naive Bayes](#)
- [Multinomial Naive Bayes](#)
- [Averaged One-Dependence Estimators \(AODE\)](#)
- [Bayesian Belief Network \(BBN\)](#)
- [Bayesian Network \(BN\)](#)
- [Decision tree algorithms\[edit\]](#)
- [Decision tree algorithm](#)
- [Decision tree](#)
- [Classification and regression tree \(CART\)](#)
- [Iterative Dichotomiser 3 \(ID3\)](#)
- [C4.5 algorithm](#)
- [C5.0 algorithm](#)
- [Chi-squared Automatic Interaction Detection \(CHAID\)](#)
- [Decision stump](#)
- [Conditional decision tree](#)
- [ID3 algorithm](#)
- [Random forest](#)
- [SLIQ](#)

Linear classifier[edit]

- [Linear classifier](#)
- [Fisher's linear discriminant](#)
- [Linear regression](#)
- [Logistic regression](#)
- [Multinomial logistic regression](#)
- [Naive Bayes classifier](#)
- [Perceptron](#)
- [Support vector machine](#)

Unsupervised learning[edit]

- [Unsupervised learning](#)
- [Expectation-maximization algorithm](#)
- [Vector Quantization](#)
- [Generative topographic map](#)
- [Information bottleneck method](#)
- [Artificial neural networks\[edit\]](#)
- [Artificial neural network](#)
- [Feedforward neural network](#)
- [Logic learning machine](#)
- [Self-organizing map](#)
- [Association rule learning\[edit\]](#)
- [Association rule learning](#)
- [Apriori algorithm](#)
- [Eclat algorithm](#)

Semi-supervised learning[edit]

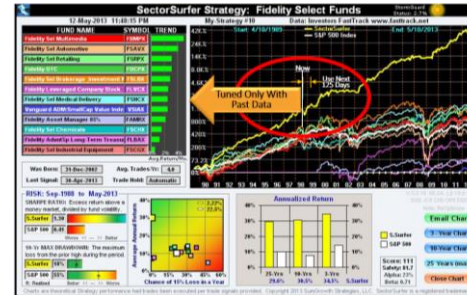
- [Semi-supervised learning](#)
- [Active learning](#) – special case of semi-supervised learning
- [Generative models](#)
- [Low-density separation](#)
- [Graph-based methods](#)
- [Co-training](#)
- [Transduction](#)
- [Deep learning\[edit\]](#)
- [Deep learning](#)
- [Deep belief networks](#)
- [Deep Boltzmann machines](#)
- [Deep Convolutional neural networks](#)
- [Deep Recurrent neural networks](#)
- [Hierarchical temporal memory](#)
- [Generative Adversarial Networks](#)
- [Deep Boltzmann Machine \(DBM\)](#)
- [Stacked Auto-Encoders](#)
- [Other machine learning methods and problems\[edit\]](#)
- [Anomaly detection](#)
- [Association rules](#)
- [Bias-variance dilemma](#)
- [Classification](#)
 - [Multi-label classification](#)
- [Clustering](#)
- [Data Pre-processing](#)
- [Empirical risk minimization](#)
- [Feature engineering](#)
- [Feature learning](#)
- [Learning to rank](#)
- [Occam learning](#)
- [Online machine learning](#)
- [PAC learning](#)
- [Regression](#)
- [Reinforcement Learning](#)
- [Semi-supervised learning](#)
- [Statistical learning](#)
- [Structured prediction](#)
- [Graphical models](#)
- [Bayesian network](#)
- [Conditional random field \(CRF\)](#)
- [Hidden Markov model \(HMM\)](#)
- [Unsupervised learning](#)
- [VC theory](#)



How SumGrowth Will Use AI

To Perceive the environment and take action to maximize success.

FWPT: Forward Walk Progressive Tuning



Old

Adaptively changing the algorithm based on the past character of the data. Walks through out-of-sample data for its buy/sell decisions.

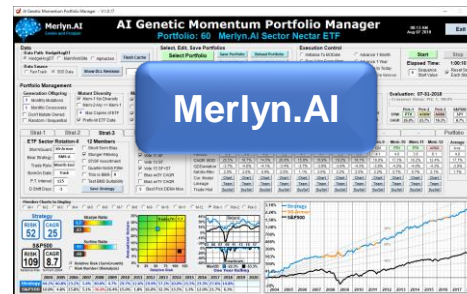
StormGuard - Armor



Old

Employs Fuzzy Logic to evaluate a composite of 12 measures of the market's character to determine current investment safety.

FWPP: Forward Walk Progressive Picking



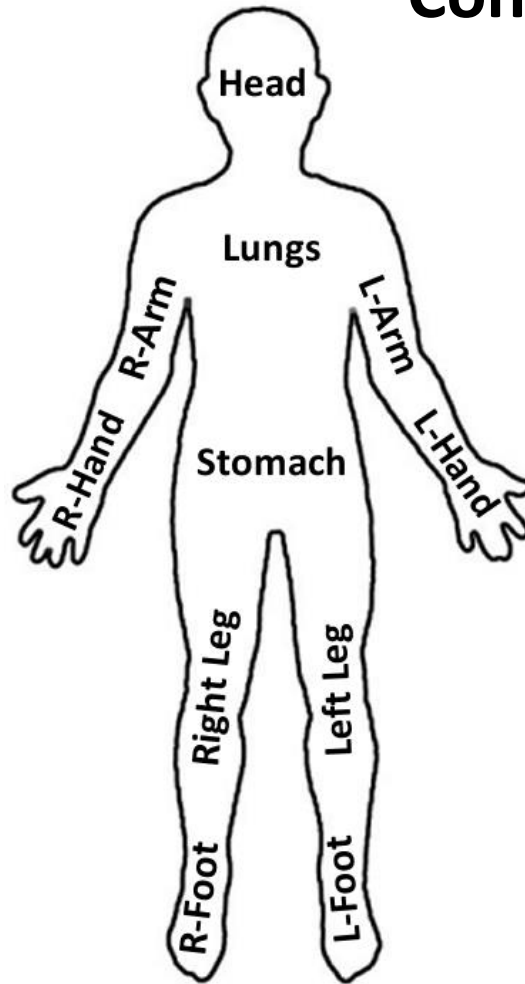
New

Uses a Genetic Algorithm to evolve the candidate funds in a population of momentum strategies to eradicate remnants of hindsight selection bias.



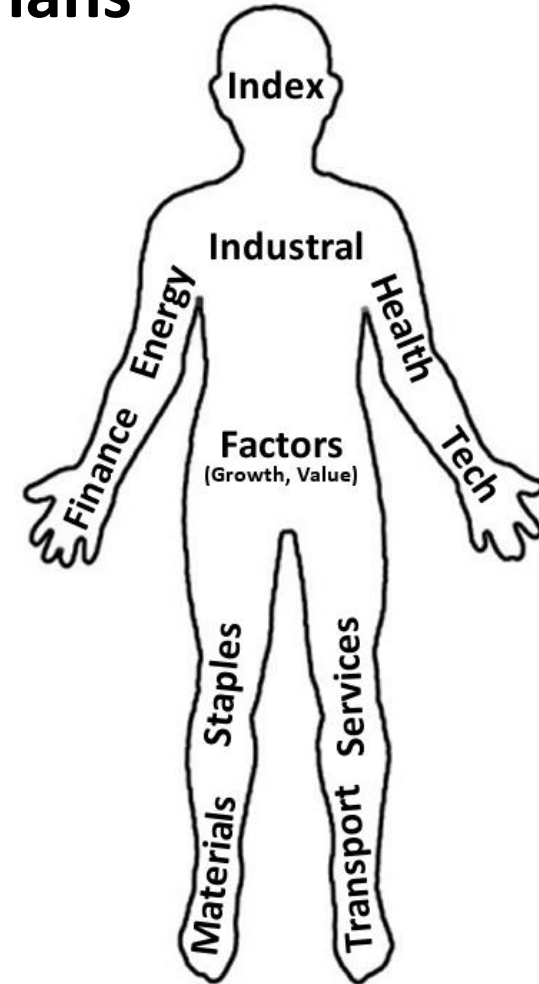
How Our Genetic Algorithm Works

Consider This Analogy to Humans



Human

**Genetic Evolution:
Mutation
Crossover**

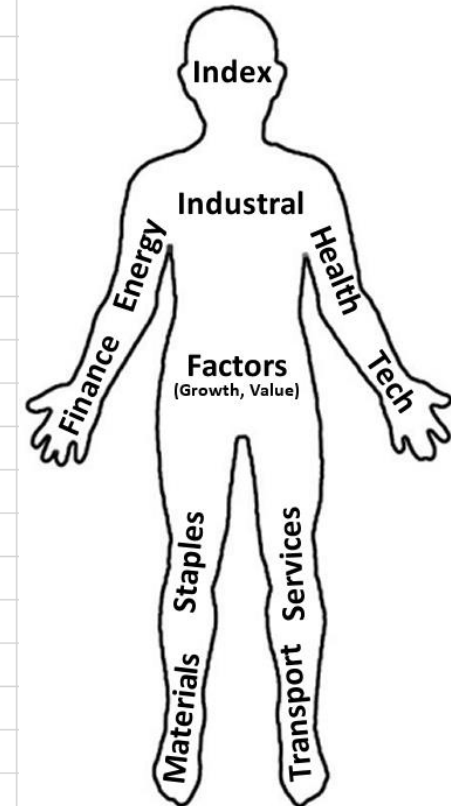


Strategy



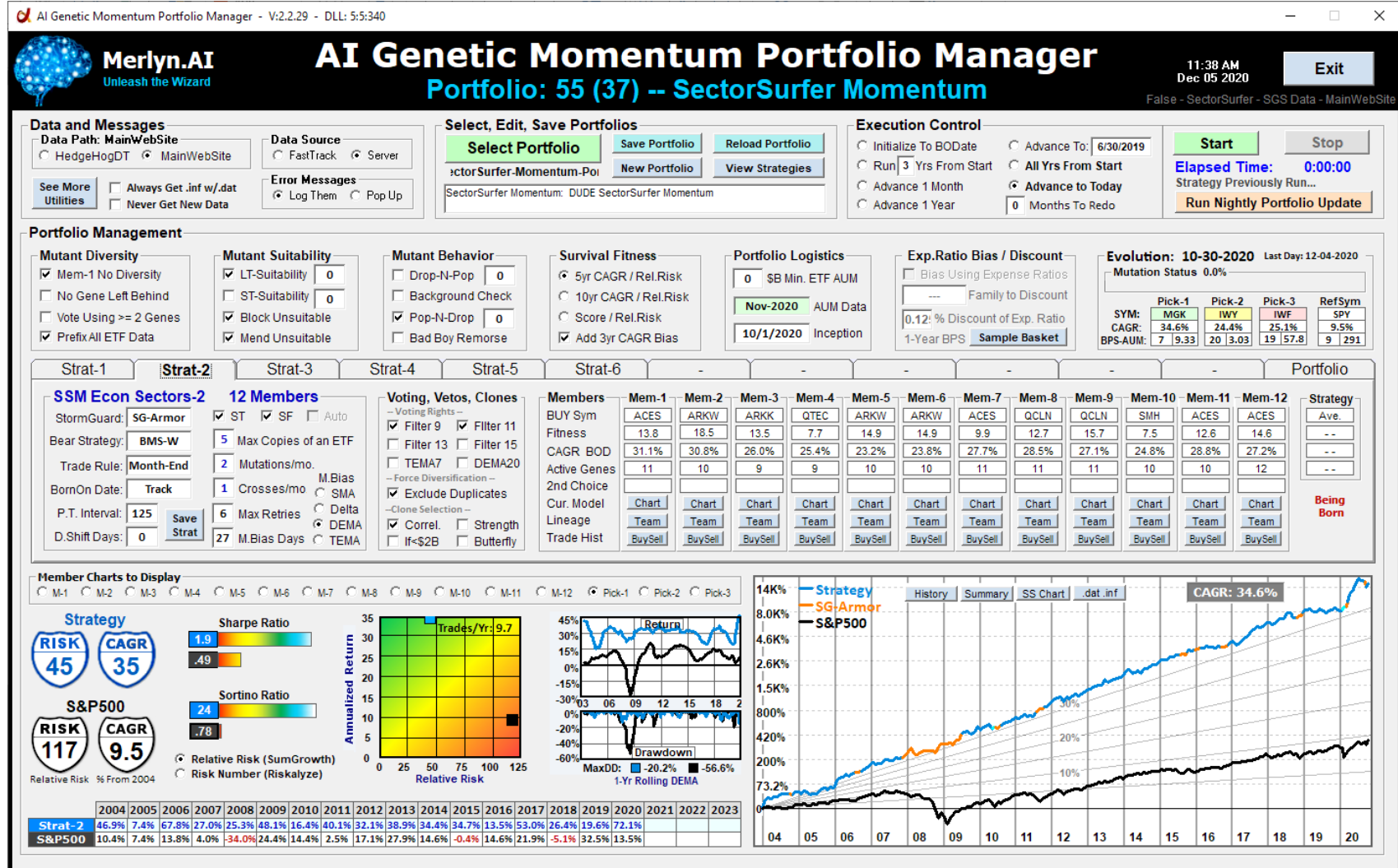
What are the Gene Mutations

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Name	ETF Sector Rotation-I													
2	Description	SG-A, BMS-A, DSD-1, Mutation and Mating. Population of 10 Strategies. SOS weighted vote. Gene Categories: Cmd, Mat, Enr, Fin, Ind, Cns, Res, Hea, Tk1,													
3	Members	10													
4	StGuard	SG-Armor													
5	BMS	BMS-A													
6	Trade	Month-End													
7	BOD	Track													
8	PT-Int	125													
9	DSDays	-1													
10	S.Filt	0													
11	S.Trends	0													
12	BothFilt	0													
13	QtrNotch	0													
14	Materials	XLB,IYM,VAW,RTM,IGE													
15	Energy	XLE,IYE,VDE,FXN,FENY,RYE													
16	Financial	XLF,IYG,IYF,VFH,FNCL,KBWB,KBWR,FXO,KIE,KRE,KBE,RYF,IAT,IAK,IAI													
17	Industrial	XLI,DIA,IYT,IYJ,ITA,VIS,FXR,XAR,PPA,XTN,RGI													
18	Staples	XLP,VDC,IYK,RHS,FXG,FSTA,RCD,PBJ													
19	Retail/Discr	XLY,IYC,RTH,XRT,PMR,VCR,FDIS,FXD,IBUY,IPAY,FONE,GAMR													
20	Healthcare	XLV,IYH,VHT,IHI,FXH,RYH,IHF,XHE,PTH													
21	Bio-Pharma	PPH,BBH,PJP,IBB,XBI,FBT,IHE,XPH													
22	Technology	XLK,IYW,RYT,IGV,VGT,FXL,ROBO,ARKK,ARKW													
23	Semi-Tech	QQQ,IGM,IGN,XNTK,SMH,XSD,PSI,XT,XNTK,QTEC,FTEC,SNSR													
24	Factors	IVV,RSP,EQWS,GURU,EPS,EZM,CSD,MNA,DGRO,DGRW,FVD,FDL,HDV,PFM,NOBL,QDF,VIG,RDVF,SPYD,SDY,DTD,MMTM,MTUM,BEMO,FDMO,PDP													
25	Stylebox	SPY,MDY,SPYG,MDYG,SPYV,MDYV,IJH,IJJ,IJK,IVE,IVV,IVW,IJR,IJS,IJT,IWL,IWX,IWY,OEF,SPTM,RSP,RPG,FEX,FTA,FTC,FNK,FNX,FNY													
26															





All of our Published Indexes Employ Merlyn.AI Genetic Algorithms



Model Hypothetical Performance

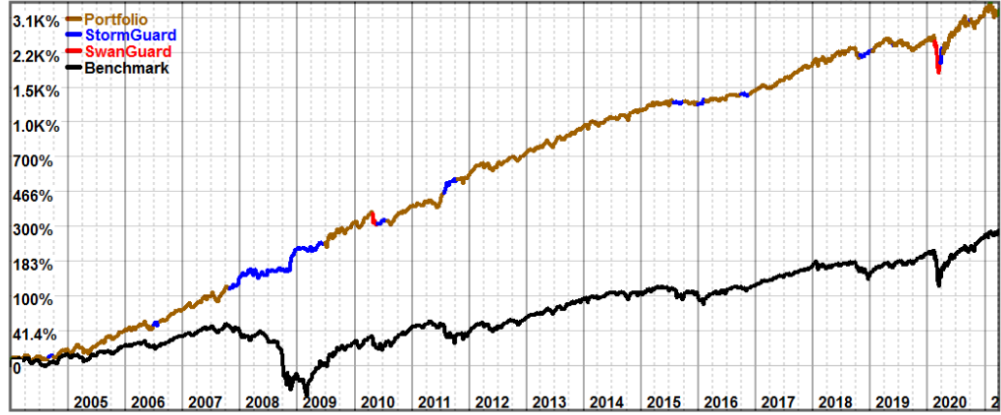
Bull-Rider Bear-Fighter Portfolio

Hypothetical Portfolio Performance

- Portfolio Inception Date: 09-01-2019 When the portfolio design was completed and available.
- Forward Walk Starting: 01-02-2004 Backtesting ends. Walk through out-of-sample data begins.
- Bear Market Strategy: BMS-I,W Invoked by StormGuard-Armor. Selects only safe harbor funds.
- Benchmark Index: B8020 Based on suitable Fidelity Asset Manager target allocation mutual funds.

	RISK	CAGR	SHARPE
Portfolio	31.9	22.7%	1.75
Benchmark	71.1	7.9%	0.36

Note: Above statistics are measured from 6/1/2004. Calculations performed by SumGrowth Strategies.



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bull-Rider Bear-Fighter	27.9%	19.1%	35.1%	23.7%	32.7%	17.1%	7.5%	12.3%	28.6%	16.5%	11.2%	29.9%
B8020 Benchmark for 80:20	37.7%	16.3%	-5.3%	15.3%	23.5%	5.8%	-0.6%	7.3%	21.1%	-8.7%	25.1%	18.7%

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 2021 SumGrowth Strategies, LLC all rights reserved.

RISK

32

Riskalyze

Merlyn.AI

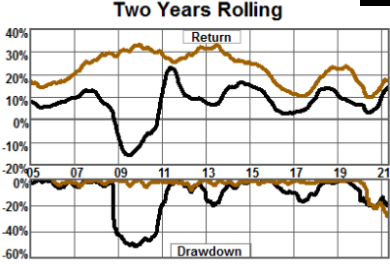
Apr 14, 2021

CAGR

23

Percent

Underlying Strategies	Weight
1. Bonds BRBF-a	10%
2. Bonds BRBF-b	10%
3. StyleMix BRBF	10%
4. Factors BRBF	10%
5. Regions BRBF	10%
6. Countries BRBF	15%
7. Sectors BRBF-a	20%
8. Sectors BRBF-b	15%



	YTD	1-Yr	3-Yr	5-Yr	10-Yr	17.3-Yr
Return	4.0%	47.2%	17.8%	19.2%	21.2%	22.7%
Drawdown	7.0%	44.8%	12.9%	13.3%	9.8%	7.9%

MAI Indexes

WIZ Index

Bull-Rider Bear-Fighter Index

<https://maiindexes.com/wiz-index>

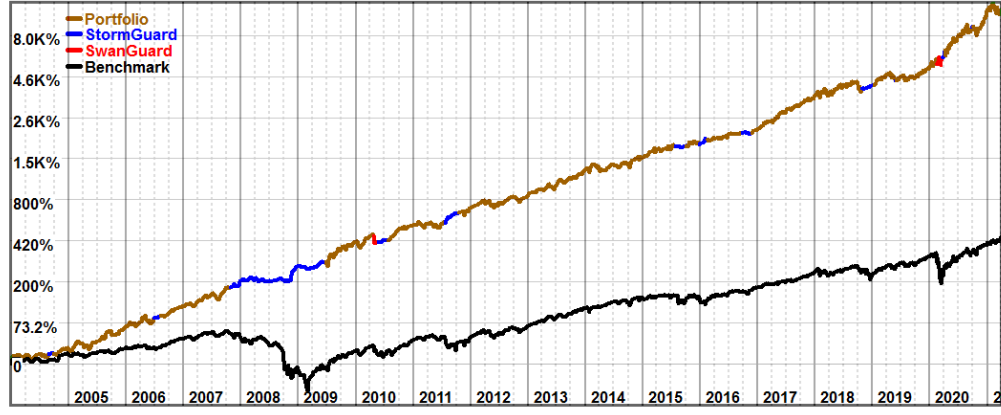
SectorSurfer Momentum Portfolio

Hypothetical Portfolio Performance

- Portfolio Inception Date: 11-01-2020 When the portfolio design was completed and available.
- Forward Walk Starting: 01-02-2004 Backtesting ends. Walk through out-of-sample data begins.
- Bear Market Strategy: BMS-W,Y Invoked by StormGuard-Armor. Selects only safe harbor funds.
- Benchmark: S&P500 Index Market-cap-weighted index of 500 largest US publicly traded companies.

	RISK	CAGR	SHARPE
Portfolio	25.8	31.7%	1.65
Benchmark	75.6	10.1%	0.50

Note: Above statistics are measured from 6/1/2004. Calculations performed by SumGrowth Strategies.



	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
SectorSurfer Momentum	36.2%	25.1%	25.7%	16.4%	44.4%	17.7%	22.6%	17.2%	54.0%	19.3%	25.9%	101.7%
S&P500 Index	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	31.5%	18.4%

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 2021 SumGrowth Strategies, LLC all rights reserved.

RISK

26

Riskalyze

Merlyn.AI

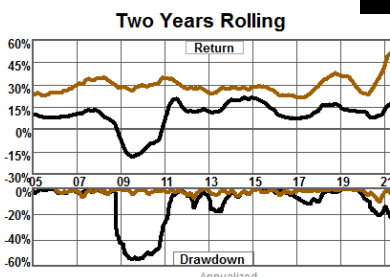
Apr 14, 2021

CAGR

32

Percent

Underlying Strategies	Weight
1. SSM Econ Sectors-1	20%
2. SSM Econ Sectors-2	20%
3. SSM Econ Sectors-3	15%
4. SSM Econ Sectors-4	15%
5. SSM GeoPolySect-1	15%
6. SSM GeoPolySect-2	15%



	YTD	1-Yr	3-Yr	5-Yr	10-Yr	17.3-Yr
Return	9.9%	75.4%	45.7%	41.2%	33.4%	31.6%
Drawdown	10.3%	47.6%	18.0%	16.9%	14.4%	10.1%

MAI Indexes

DUDE Index

SectorSurfer Momentum Index

<https://maiindexes.com/dude-index>

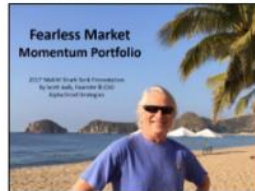
Essential Videos and Details

Need-to-Know Basics and Deep-Dive Topics for the Curious

<https://www.alphadailybrief.com/Pages/EssentialVideos.aspx>

Some Worthy Informational Videos

Technology Introduction - 7 min.



Market Crash Protection - 1 min.



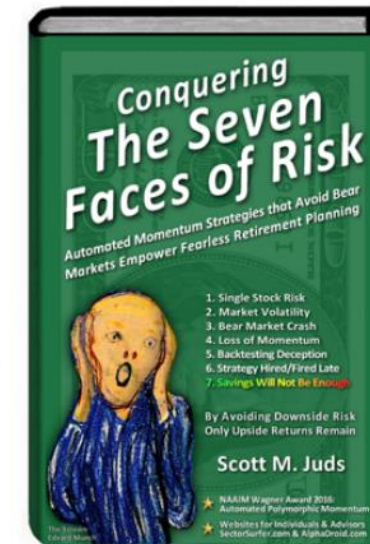
Merlyn.AI Overview - 2 min.



Technology Details - 31 min.



Merlyn.AI Details - 100 min.



Like details and stories? Click the book to start reading your free PDF copy right now!

Please also Check Out the Essential Videos Found Here:

- <https://www.alphadailybrief.com/Pages/HeatMap.aspx>
- <https://www.alphadailybrief.com/Pages/RiskAvoidance.aspx>
- <https://www.alphadailybrief.com/Pages/BearStrategies.aspx>
- <https://www.merlyn.ai/>



Sector Rotation and Risk Management
Houston AAI Chapter Sat. Nov. 19, 2022