

AAII SV CI-MI Agenda

- (6:30 – 7:00) Administrative Items & Since the Last Meeting...
- (7:00 – 7:30) More on the UIS (A1 Z)
- (7:30 – 8:15) Monthly Momentum on Sector Funds (John N)
- (8:15 – 8:45) Diagnostics of Folios (Ilya F)
- (8:45 – 9:00) Informal chats – must leave by 9:00!

Reference section:

- Performance Metrics

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Administrative Items

CI-MI Meeting Schedule

April Meeting: Sunday 4/19/15 1:30-4:00

Saratoga Library

May Meeting: Choices:

Sunday evening (6-9) 5/3 or 5/10 @ Los Altos Library

Sunday afternoon or evening 5/24 (Memorial Day) @ Los Altos Library

Holder's or other restaurant (will arrange date)

June Meeting: TBD

(Can't reserve library yet)

Saratoga & Campbell Libraries have limited hours and room availability. Los Altos Library – only weekends. We do what we can...

Upcoming Events

- AAI – SV: **Managing Portfolios in Uncertain Times, March 14th (Saturday!)**
 - **San Jose Airport Garden Hotel**, 1740 N 1st St, San Jose, CA 95112
 - www.eventbrite.com/o/aai-silicon-valley-chapter-399694412
- CTAG – Next meeting: **Wednesday 3/18/15 (next Wednesday)**
 - 1st & 3rd Wednesdays of each month.
 - **Holder's Country Inn**, 998 South De Anza Boulevard, SJ
- SectorSurfer User Group: **Scott Juds, Monday 3/23/15**
 - **Holder's Country Inn**, 998 South De Anza Boulevard, SJ
 - Dinner at 6:00, meeting at 6:30
 - Contact: Joe Gruender (SectorSurferJoe@gmail.com)
 - Group site: <https://groups.google.com/forum/?fromgroups#!forum/sectorsurfer>
- SV Options Group: **Thursday March 12th 6-9 PM (this Thursday!)**
 - Further information at <http://www.svog.org/>
 - **Elks Lodge Sunnyvale**: 375 North Pastoria Avenue, Sunnyvale

User Presentations???

- We are always looking for volunteers for presentation
 - Can be as informal or formal as you like
- Possibilities to consider – or add your own:
 - Review Dark Liquidity site strategies
 - Tool reviews: Investors FastTrack, SectorSurfer, VectorVest (various), ETF Replay, **FinViz**
 - Timers: \$NAHL, Vreba,
 - AAII: “Smart Beta” funds (DIY version), CI articles on web-based stock screening, FINVIZ, MeanVar optimization spreadsheet, O'Shaughnessy screens, CI: The Ulcer Index and Stock Screens, **52-week low screen**, AAI CI Portfolio Optimization Program, **Even more Logical Invest strategies**, **VizMetrics strategies**, **Portfolio Monkey**
 - Pring-Turner Business Cycle Approach
 - Biotech investing (core & explore, funds, screens, trading algs, etc.)
 - Review of algorithmic trading platform sites, motif investing, Gerstein screening papers
 - Wealth Index strategies, DIY FYLD equivalent with ADRs
 - Scott Burns' Graham Value Scree

Yahoo! Group

- Yahoo Group is the point of contact, information
 - Name: AAI-SV-CI-MI-Group
 - Link: <https://groups.yahoo.com/neo/groups/AAI-SV-CI-MI-Group/info>
 - Alternative: **Go to Yahoo! Groups home page and search for “aai sv”**
 - Also listed in monthly AAI mailers (tinyurl provided)
- Admin points
 - Email sign-ups: **Go to the Yahoo! Group and sign-up - you'll get full posting access to everything (after I approve your membership request)**
 - Feel free to post emails to the group (currently unmoderated), hold conversations outside meetings
 - If you want to post a file, provide a link, etc., email Al or the group
 - Al_zmyslowski@yahoo.com
 - **Files will be posted at Dropbox (in read-only mode) – use link in Link section**
 - To save space on larger files they may be zipped with 7zip (open source tool). Links to 7zip are also in the links section at the Yahoo! Group
- **New??: I can give you a B-card with critical info**

Since the Last Meeting...

Since the Last Meeting...

- New Tracking Folios (see next sides for detail)
 - Managed Futures Tracking Folio – HFXCX (#796)
 - UIS 1x & 3x Tracking Folios
 - Global Market & VizMetrics Max Sharpe Tracking Folios (#799)
- SV Chapter -- Robust Portfolio Diversification (#798,799)
 - Standard diversification approach + managed futures
- Fed Monetary Policy Update – FCO (#800-803)
- Meb Faber's Free Book Offer (#804-806, 809, 810)
- Tracking Folio Updates for February (#807)
- Big Issue for IWM (#811-813, 815, 816)
 - IWM rotation issue??? Measuring different indices??
- Initial Unemployment Claims Timer (#817, 819, 822, 824-826, 828)
 - See next slides
- \$46B in Buybacks (#820)

Market Health Indicators

Indicator	Type	Status	Comment
10M SMA SPY	Market Timer	Long	1.03 SPY/10M SMA at present 1.0 is lower limit
Storm Guard	Market Timer	Long	1.6% at present 0% is lower limit
New High - New Low	Market Timer	Long	+35 BP \$NAHL/10d EMA at present 0 BP is lower limit
Trailing 60d SPY Volatility	Volatility	Long	0.93% 60d Std Dev at present 1% is upper limit
Initial Unemployment Claims Timer	Economic	Long	1.09x 22 wk SMA of SA IU Claims 1.12x is upper limit
Economic Indicators			
TED Spread	Credit Crunch	Long	0.26% at present 1% is upper limit
Initial Unemployment claims prediction	Recession warning	Long	November set record low -- 3 months in 4-19 months away
ECRI WLIg	Recession warning	Flat	Current reading is -4.6. -2.0 is limit When on recession 6-9 months away
FRED Recession probability	Recession warning	Long	0.98% at present 10% worry, 20% upper limit

Universal Investment Strategy 1x & 3x

- Basic Alg
 - Buy Rules 1x Weight : SPY-TLT using MinVar alg with 0.63% SD volatility limit
 - Calculate Standard Deviation (SD), daily volatility, over the trailing 63 days.
 - Find minimum variance (lowest volatility) by mixing SPY & TLT in 5% increments
 - If SD is $> 0.63\%$ on a daily basis then add cash to meet 0.63% SD target
 - See Jan. '15 presentation for details
 - Buy Rules 3x weight: SPXL-TMF using MS-MV alg with 3% SD volatility limit
 - Calculate Standard Deviation (SD), daily volatility, gain, Sharpe over trailing 63 days
 - Find Max Sharpe (MS) ratio by mixing SPXL & TMF in 5% increments
 - If Max Sharpe is negative use MinVar (MV) alg to set weights
 - If SD is $> 3\%$ on a daily basis then add cash to meet 3% SD target
 - See Jan. '15 presentation for details
 - Sell Rules: None. Algs determine mix of SPY, TLT (for 1x) or SPXL, TMF (for 3x) and cash.
- Timing: None (only volatility control)
- Trades: Monthly
- Implementation comments:
 - Started January '15

Performance: CI-LI UI 1x

Change View to:

CI-LI UI 1x

GO

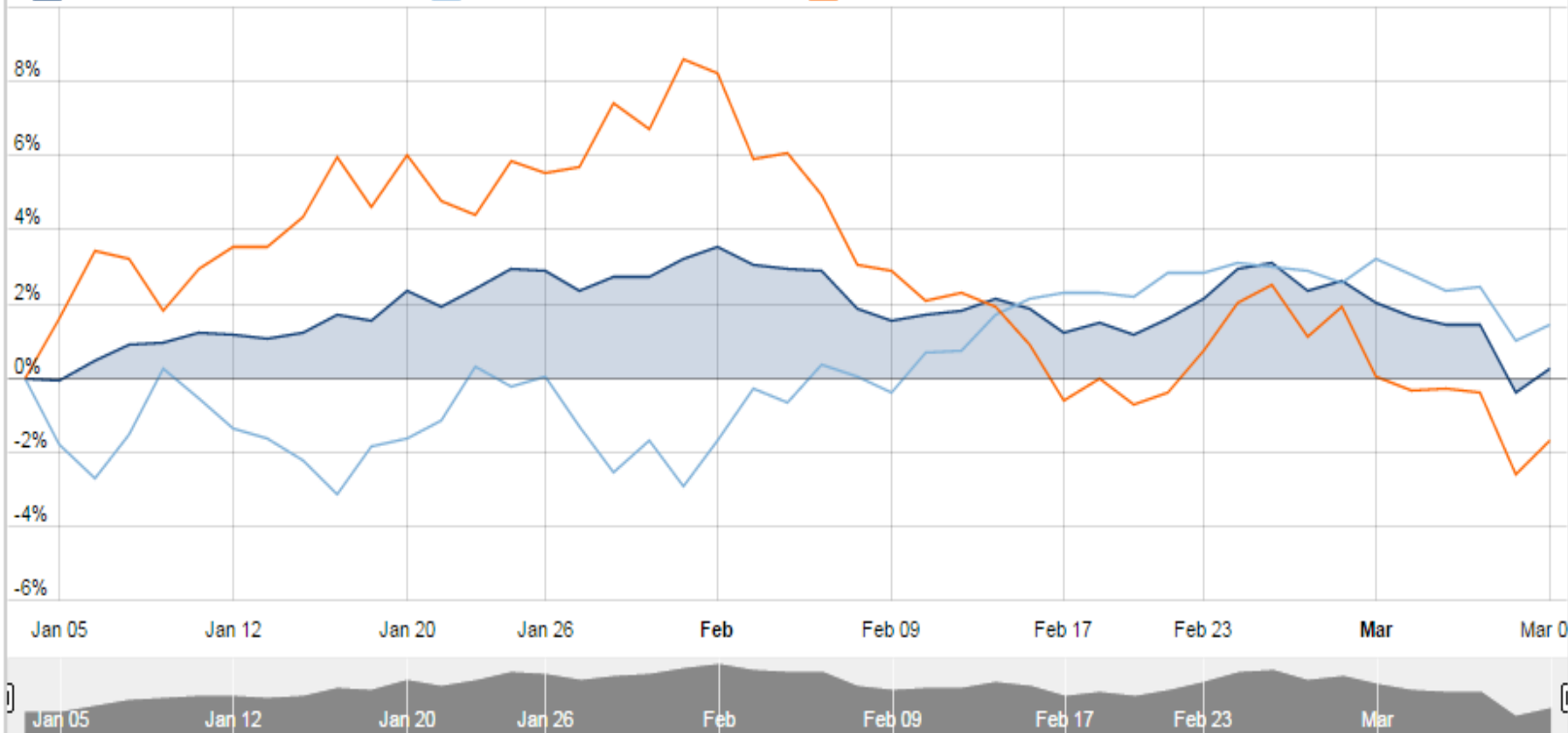
Performance FAQs

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Time-Weighted Return Graph

CI-LI UI 1x (Without Fees) 0.27% SPDR S&P 500 TRUST 1.43% ISHARES BARCLAYS 20+ YEAR TREASURY BOND -1.72%



From: 01-02-2015 To: 03-09-2015

3d 5d 1m 3m **YTD** 1y 3y 5y Max

Portfolio Summary

Performance: CI-LI UI 3x

Change View to:

CI-LI UI 3x

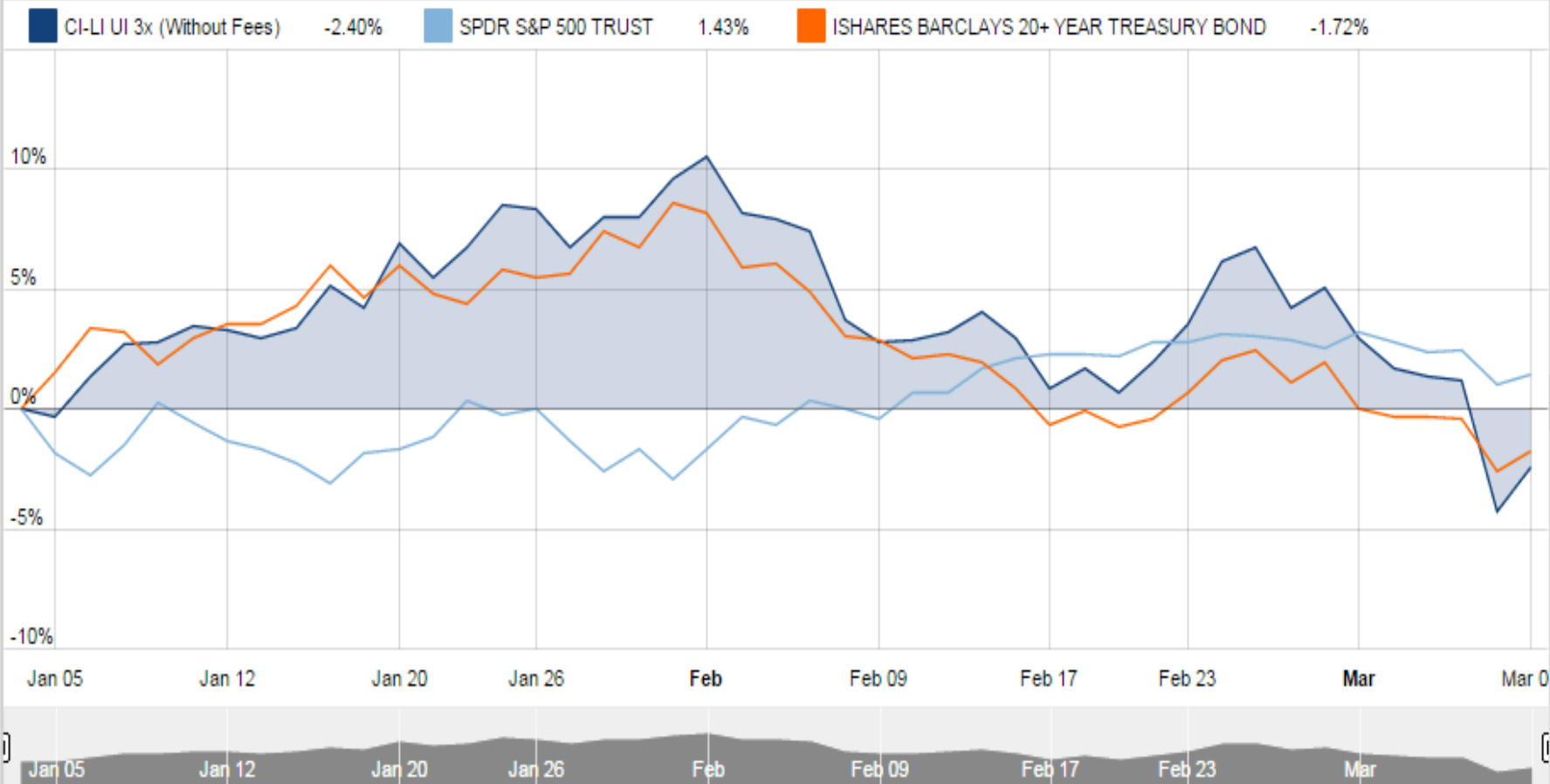
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Time-Weighted Return Graph



Portfolio Summary


From: 01-02-2015 To: 03-09-2015

3d 5d 1m 3m **YTD** 1y 3y 5y Max

Folio Holdings: CI-LI UI 1x


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Holdings Summary

	Securities	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Gain %
Totals	2	\$498.75	(\$1.53)	(0.31%)	(\$2.48)	(0.50%)

Holdings


[Expand View](#) [Reset View](#)

Symbol	Company Name	Shares	Last Price	Price Change	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Ga	Current Weight
SPY	SPDR S&P 500 TRUST	1.32559	\$204.98	(\$3.38)	\$271.72	(\$4.48)	(1.62%)	\$2.80	1.04%	54.48%
TLT	ISHARES BARCLAYS 20+ YE...	1.79782	\$126.28	\$1.64	\$227.03	\$2.95	1.32%	(\$5.28)	(2.27%)	45.52%


Folio Holdings: CI-LI UI 3x


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Holdings Summary

	Securities	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Gain %
Totals	2	\$485.27	(\$2.72)	(0.56%)	(\$14.50)	(2.90%)

Holdings

[Expand View](#) [Reset View](#)

Symbol	Company Name	Shares	Last Price	Price Change	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Ga	Current Weight
SPXL	DIREXION DAILY S&P 500 B...	2.73952	\$85.83	(\$4.38)	\$235.13	(\$12....	(4.86%)	\$4.95	2.15%	48.45%
TMF	DIREXION DAILY 20+ YEAR ...	2.90788	\$86.02	\$3.19	\$250.14	\$9.28	3.85%	(\$19.45)	(7.22%)	51.55%

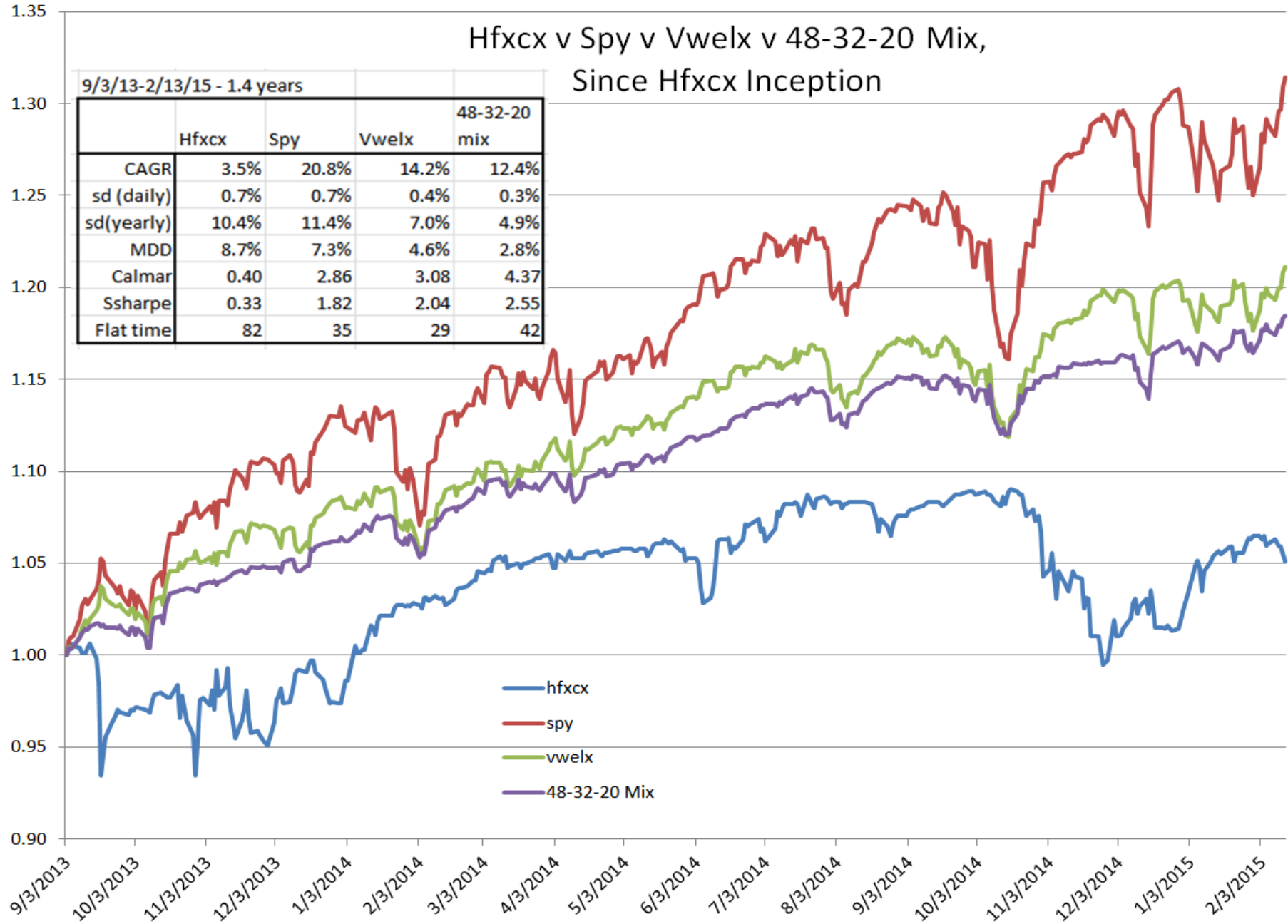
Catalyst Hedged Futures Strategy Fund (HFXCX)

- Basic Alg
 - Buy Rules: “Buy & Hold” subject to Sell Rules
 - See Feb. ‘15 folder at Dropbox for details
 - Sell Rules: Consider selling if the following rules are violated
 - $> 20\%$ MDD at any time; DD period (“flat time”) > 252 trading days (1 year)
 - MPT stats: $\beta > 0.3$, $\alpha < 0\%$, $R\text{-squared} > 0.3$, $SD > 12\%$ (since fund inception)
 - $CAGR < 2\%$ (since fund inception)
- Timing: None
- Trades: None – status tracked monthly -- see sell rules
- Implementation comments:
 - Started February ’15
- Note: Sell rules to be revised each year based on additional data. Next revision due in Feb. ‘16

Hfxcx v Spy v Vwelx v 48-32-20 Mix, Since Hfxcx Inception

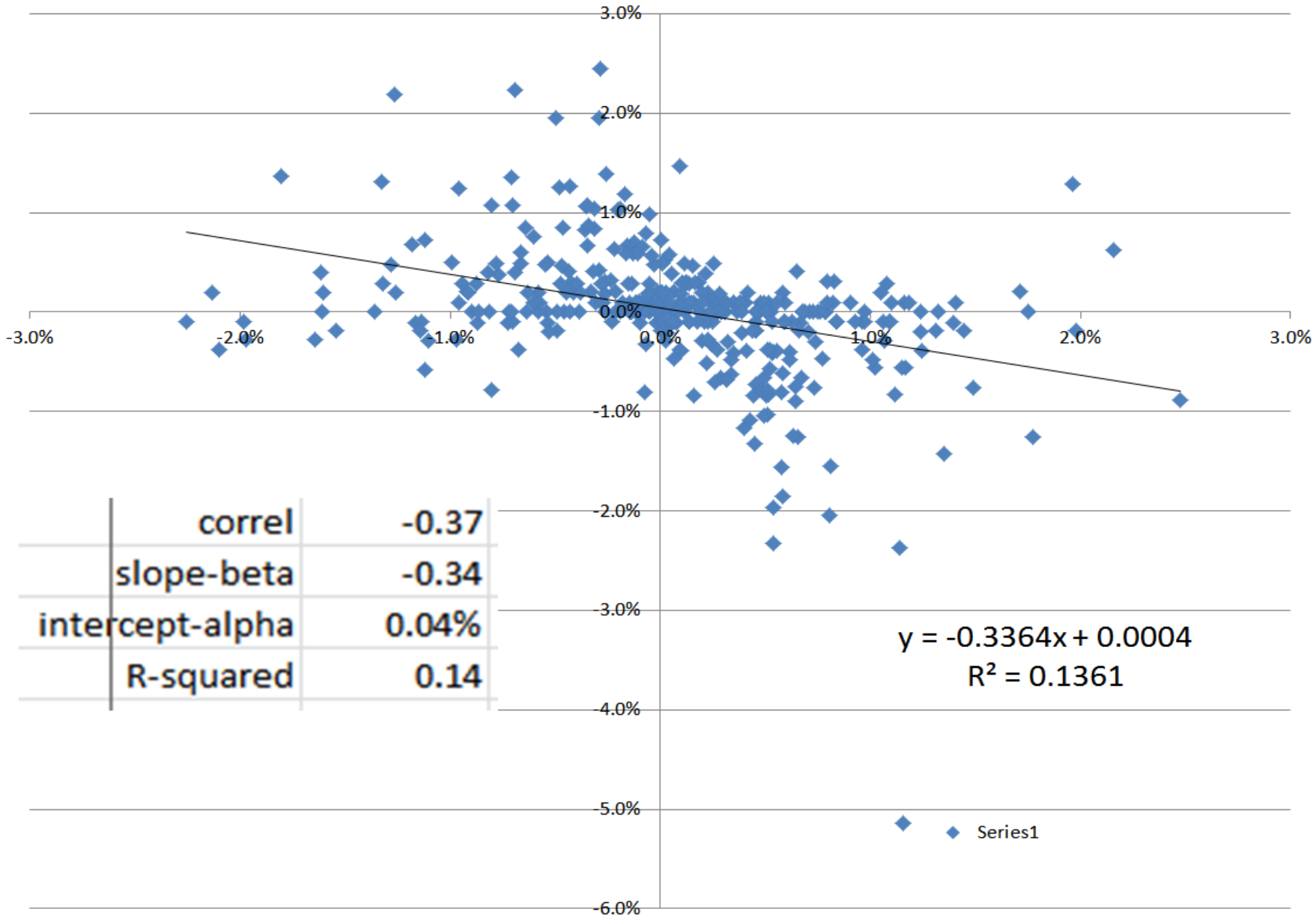
9/3/13-2/13/15 - 1.4 years

	Hfxcx	Spy	Vwelx	48-32-20 mix
CAGR	3.5%	20.8%	14.2%	12.4%
sd (daily)	0.7%	0.7%	0.4%	0.3%
sd(yearly)	10.4%	11.4%	7.0%	4.9%
MDD	8.7%	7.3%	4.6%	2.8%
Calmar	0.40	2.86	3.08	4.37
Ssharpe	0.33	1.82	2.04	2.55
Flat time	82	35	29	42



— hfxcx
 — spy
 — vwelx
 — 48-32-20 Mix

Hfxcx v Spy: Scatter Plot with MPT Stats



CWM Global Market: Background

Objective

In 1952, Nobel economist Harry Markowitz established modern portfolio theory (MPT). The goal of investing using MPT became for a portfolio to deliver the greatest returns for the least amount of risk.

In 1958, Nobel economist James Tobin concluded that while many possible portfolios exist, there is only 1 super-efficient portfolio that cannot be improved upon. The super-efficient portfolio sits on a knife edge of utility where any change made to it is a change for the worse, delivering poorer returns for greater risk.

In 1964, Nobel economist William Sharpe proved that Tobin's super-efficient portfolio was none other than the global market portfolio: the portfolio of all risky assets proportionally weighted by their market prices.

CWM's Global Market folio approximates this super-efficient portfolio through the use of index ETFs that mirror the various underlying asset classes.

CWM folios are created and maintained by Conservative Wealth Management LLC using their proprietary asset allocations and consist of ETFs. You can learn more about Conservative Wealth Management LLC by visiting their website at www.cwmllc.com.

Please review the investment information at www.cwmllc.com to ensure that this folio meets your investment objectives.

3/10/2013

Strategy

The CWM Global Market folio seeks to mirror the capitalization-weighted investable allocation of all assets in the world. It is based on the Nobel-prize winning works of Harry Markowitz, James Tobin, and William Sharpe, and seeks to capture the long-term growth of capital in global capital markets. Index ETFs are employed to glean the returns of all major asset classes from the global market in a single portfolio. As the "portfolio of everything," it seeks to deliver (net of frictions) the returns and risks of the entire global investable market.

CWM Global Market: Background

Performance

Holdings

Methodology

Last Updated: February 19, 2015

Category: Strategy

Inception Date: July 28, 2014

Date Funded: July 28, 2014*

	Follo	S&P 500 Total Return
One-Month	1.66%	4.1%
Three-Month	2.26%	2.92%
Year-to-Date	2.16%	2.18%
One-Year	N/A	17.07%
Three-Year (Annualized)	N/A	17.99%
Five-Year (Annualized)	N/A	16%
Since Inception	1.58%	N/A
Volatility	5.01%	11.61%

CWM Global Market: Background

Performance

Holdings

Methodology

Steps to Create This Folio

1. [Conservative Wealth Management LLC's](#) Global Market folio begins with the 2012 academic [research](#) of Doeswijk, Lam, and Swinkels that measure the weights of the various global asset classes, and then translates and updates this research to the present through the use of index ETFs. It also includes a proportionate allocation to gold and municipal bonds, not called out in the Doeswijk, Lam, and Swinkel's model.
2. The folio was created using proprietary methodology at Conservative Wealth Management LLC based on research by Doeswijk, Lam, and Swinkels published in 2014 in the *Financial Analysis Journal*.
3. Exchange-traded funds were selected by Conservative Wealth Management LLC using their proprietary criteria.
4. Securities were then weighted Conservative Wealth Management LLC using their criteria.

Number of Securities

There are 15 ETFs in the folio.

Update Frequency

The CWM Global Market folio is not expected to be rebalanced.

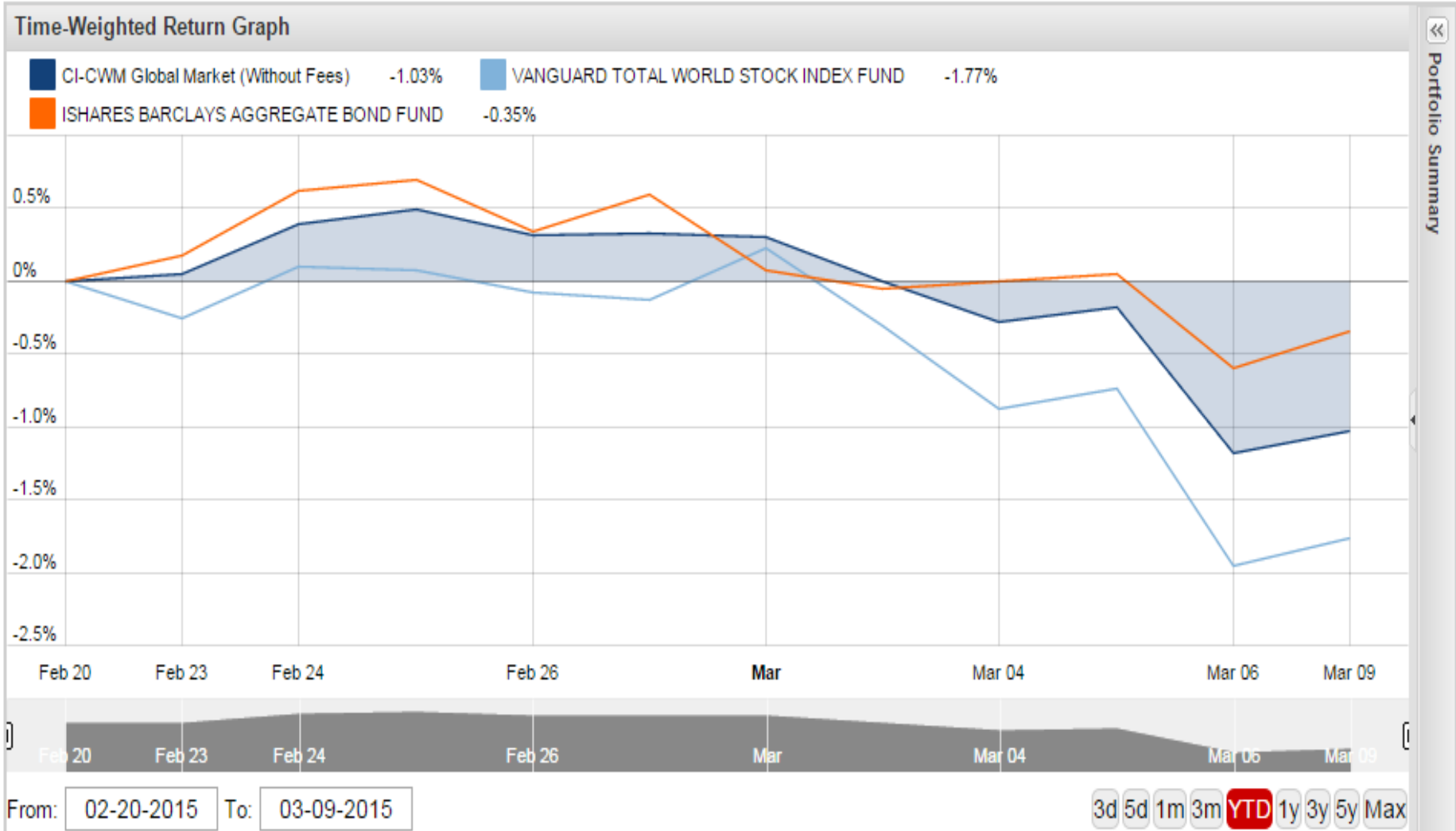
If the characteristics of the folio have changed substantially, the securities included may change. Also, corporate actions, such as a merger, or other events may cause changes to the securities held at any time. Your returns may deviate significantly from the values displayed here, due to many factors, including how long after a folio has been updated that you place orders to update your holdings.

CWM Global Market

- Basic Alg
 - Buy and hold the “Global Market”
 - Sell Rules: None. Intended to be a long term holding.
- Timing: None (only volatility control)
- Trades: Very infrequently
- Implementation comments:
 - Started February ‘15

Performance: CI-CWM Global Market

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Portfolio Summary


Folio Holdings: CI-CWM Global Market


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Holdings Summary

	Securities	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Gain %
Totals	15	\$490.98	(\$3.43)	(0.69%)	(\$9.02)	(1.80%)

Holdings

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Symbol	Company Name	Shares	Last Price	Price Change	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Gain %	Current Weight
AGG	ISHARES BARCLAYS AGGR...	0.84446	\$110.24	\$0.26	\$93.09	\$0.22	0.24%	(\$0.41)	(0.43%)	18.96%
BNDX	VANGUARD TOTAL INTERNA...	2.21850	\$53.83	\$0.19	\$119.42	\$0.42	0.35%	\$0.42	0.35%	24.33%
EMLC	MARKET VECTORS EMERGI...	0.60650	\$19.51	(\$0.23)	\$11.83	(\$0.14)	(1.17%)	(\$0.67)	(5.34%)	2.41%
GLD	SPDR GOLD SHARES	0.06499	\$111.42	(\$0.55)	\$7.24	(\$0.04)	(0.49%)	(\$0.26)	(3.45%)	1.47%
HYXU	ISHARES INC GL HG YL CP BD	0.08185	\$46.35	(\$0.71)	\$3.79	(\$0.06)	(1.51%)	(\$0.21)	(5.16%)	0.77%
JNK	SPDR BARCLAYS CAPITAL ...	0.10111	\$39.10	(\$0.09)	\$3.95	(\$0.01)	(0.23%)	(\$0.05)	(1.16%)	0.81%
MUB	ISHARES S&P NATIONAL M...	0.15859	\$109.62	\$0.42	\$17.38	\$0.07	0.38%	(\$0.12)	(0.66%)	3.54%
PSP	POWERSHARES LISTED PRI...	1.68248	\$11.30	(\$0.17)	\$19.01	(\$0.29)	(1.48%)	(\$0.49)	(2.50%)	3.87%
TIP	ISHARES BARCLAYS TIPS B...	0.04438	\$111.93	\$0.13	\$4.97	\$0.01	0.12%	(\$0.03)	(0.65%)	1.01%
VEA	VANGUARD EUROPE PACIFI...	2.02384	\$38.93	(\$0.83)	\$78.79	(\$1.68)	(2.09%)	(\$2.71)	(3.33%)	16.05%
VNQ	VANGUARD REIT ETF	0.10601	\$80.95	(\$0.06)	\$8.58	(\$0.01)	(0.07%)	(\$0.42)	(4.65%)	1.75%
VNQI	VANGUARD GLOBAL EX-U.S....	0.27255	\$53.98	(\$0.90)	\$14.71	(\$0.25)	(1.64%)	(\$0.79)	(5.08%)	3.00%
VTI	VANGUARD TOTAL STOCK ...	0.87100	\$106.22	(\$1.64)	\$92.52	(\$1.43)	(1.52%)	(\$2.48)	(2.61%)	18.84%
VWO	VANGUARD EMERGING MAR...	0.27764	\$39.15	(\$0.83)	\$10.87	(\$0.23)	(2.07%)	(\$0.63)	(5.48%)	2.21%
WIP	SPDR DB INTERNATIONAL G...	0.08970	\$53.60	(\$0.33)	\$4.81	(\$0.03)	(0.61%)	(\$0.19)	(3.84%)	0.98%

VizMetrics Max Sharpe: Background

Objective

The VizMetrics Max Sharpe folio is designed for investors seeking to create an ETF portfolio that responds to market conditions while maximizing risk-adjusted return. The risk-adjusted return is represented by the Sharpe Ratio. Visit www.VizMetrics.com for additional information about the VizMetrics Max Sharpe folio design and asset allocation.

Strategy

The VizMetrics Max Sharpe folio uses a tactical (also called “dynamic” or “active”) asset allocation approach. This folio seeks to maximize risk-adjusted return by choosing an asset allocation that maximizes the Sharpe ratio, which is a measure of risk-adjusted return developed by Nobel Laureate and Stanford Professor William Sharpe. This folio is allowed to choose from 8 ETFs that represent major asset classes: U.S. large-cap equity, U.S. small-cap equity, NASDAQ 100 equity, U.S. real estate, U.S. long-term treasury bonds, emerging markets equity, developed markets equity, and gold.

VizMetrics Max Sharpe: Background

Performance

Holdings

Methodology

Last Updated: February 19, 2015

Category: Strategy

Inception Date:

Date Funded: N/A*

	Follo	S&P 500 Total Return
One-Month	-2.66%	4.1%
Three-Month	N/A	2.92%
Year-to-Date	0.11%	2.18%
One-Year	N/A	17.07%
Three-Year (Annualized)	N/A	17.99%
Five-Year (Annualized)	N/A	16%
Since Inception	0.8%	N/A
Volatility	7.27%	11.61%

VizMetrics Max Sharpe: Background

Performance

Holdings

Methodology

Steps to Create This Folio

1. VizMetrics chooses the set of possible asset classes that will be used for this folio's asset allocation, which are the following: U.S. Large-Cap Equity, U.S. Small-Cap Equity, NASDAQ 100 Equity, U.S. Real Estate, U.S. Long-Term Treasury Bonds, Emerging Markets Equity, International Developed Markets Equity, and Gold.
2. VizMetrics chooses one ETF to represent each asset class, based on liquidity, history, and cost considerations.
3. VizMetrics runs the VizMetrics Max Sharpe investment algorithm to choose the optimal asset allocation portfolio based on the Sharpe Ratio.
4. VizMetrics determines the weighting (% allocation) for each asset class ETF based on the chosen asset allocation.

Number of Holdings

This folio includes up to eight ETFs.

Update Frequency

VizMetrics Max Sharpe folio is updated monthly.

If the characteristics of the folio have changed substantially, the securities included may change. Also, corporate actions, such as a merger, or other events may cause changes to the securities held at any time. Your returns may deviate significantly from the values displayed here, due to many factors, including how long after a folio has been updated that you place orders to update your holdings.

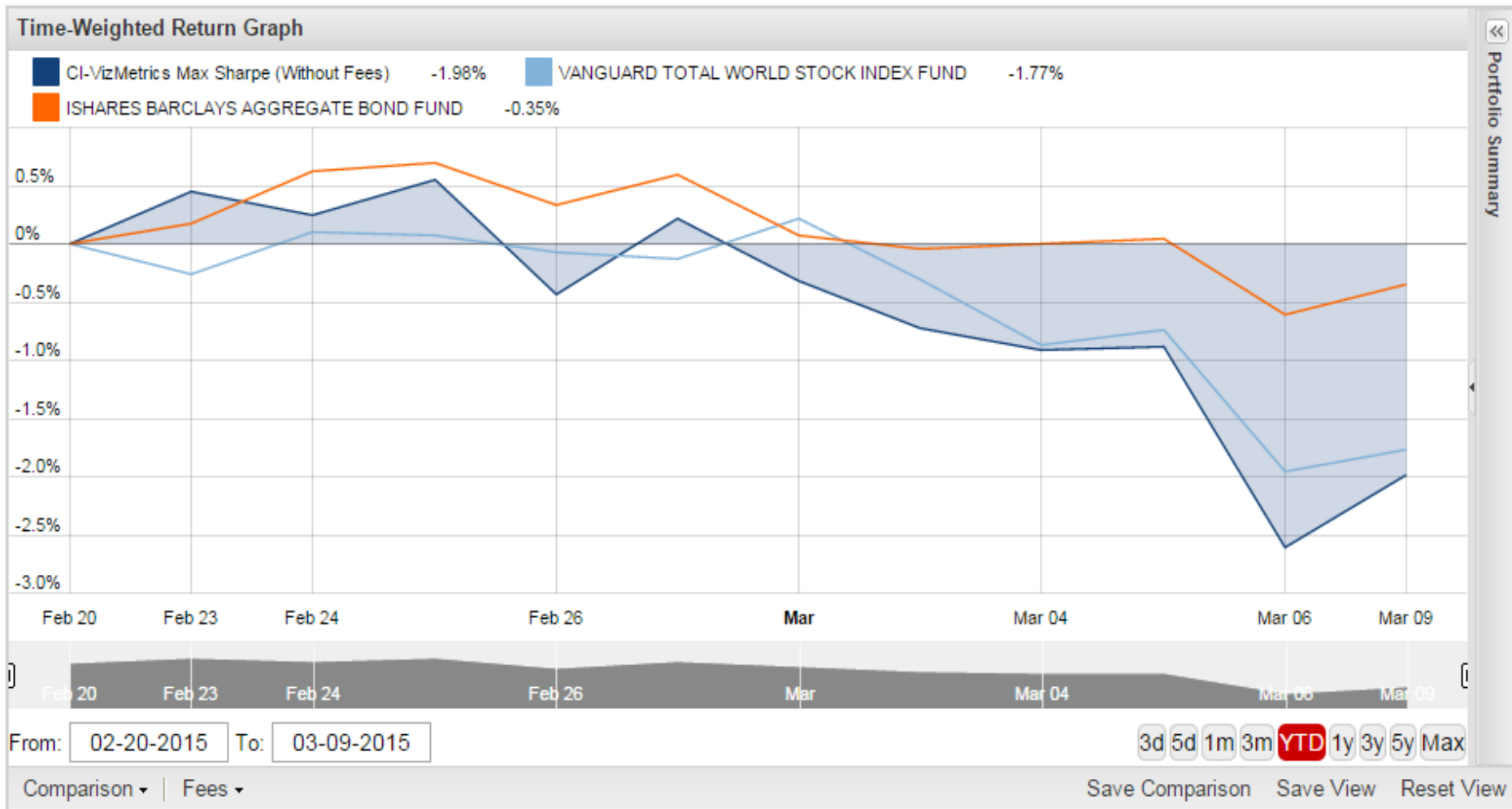
VizMetrics Max Sharpe

- Basic Alg
 - Buy and follow the trades at FFN for this folio
 - Essentially this performs a Max Sharpe calculation over the following 8 ETFs: SPY, IWM, QQQ, IYR, TLT, EEM, EFA, GLD
 - Sell Rules: None. Intended to be a long term holding.
 - ETFs will be sold when they achieve a negative Sharpe ratio. For example at 1st buy (2/22/15) only 3 of 8 ETFs are held
- Timing: None – incorporated in strategy
- Trades: monthly
- Implementation comments:
 - Started February '15

Performance: CI-VizMetrics Max Sharpe

Change View to: CI-VizMetrics Max Sharpe GO

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Portfolio Summary


Folio Holdings: CI-VizMetrics Max Sharpe


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Holdings Summary

	Securities	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Gain %
Totals	4	\$488.63	(\$0.92)	(0.19%)	(\$9.18)	(1.84%)

Holdings

Expand View

Reset View

Symbol	Company Name	Shares	Last Price	Price Change	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Ga	Current Weight
IWM	ISHARES RUSSELL 2000 IND...	0.38629	\$120.30	(\$1.40)	\$46.47	(\$0.54)	(1.15%)	(\$0.59)	(1.26%)	9.51%
QQQ	POWERSHARES QQQ TRUS...	0.69556	\$105.72	(\$2.00)	\$73.53	(\$1.39)	(1.86%)	(\$2.35)	(3.10%)	15.05%
SPY	SPDR S&P 500 TRUST	0.62477	\$204.98	(\$3.38)	\$128.07	(\$2.11)	(1.62%)	(\$4.10)	(3.10%)	26.21%
TLI	ISHARES BARCLAYS 20+ YE...	1.90500	\$126.28	\$1.64	\$240.56	\$3.12	1.32%	(\$2.14)	(0.88%)	49.23%

Initial Unemployment Claims Timer

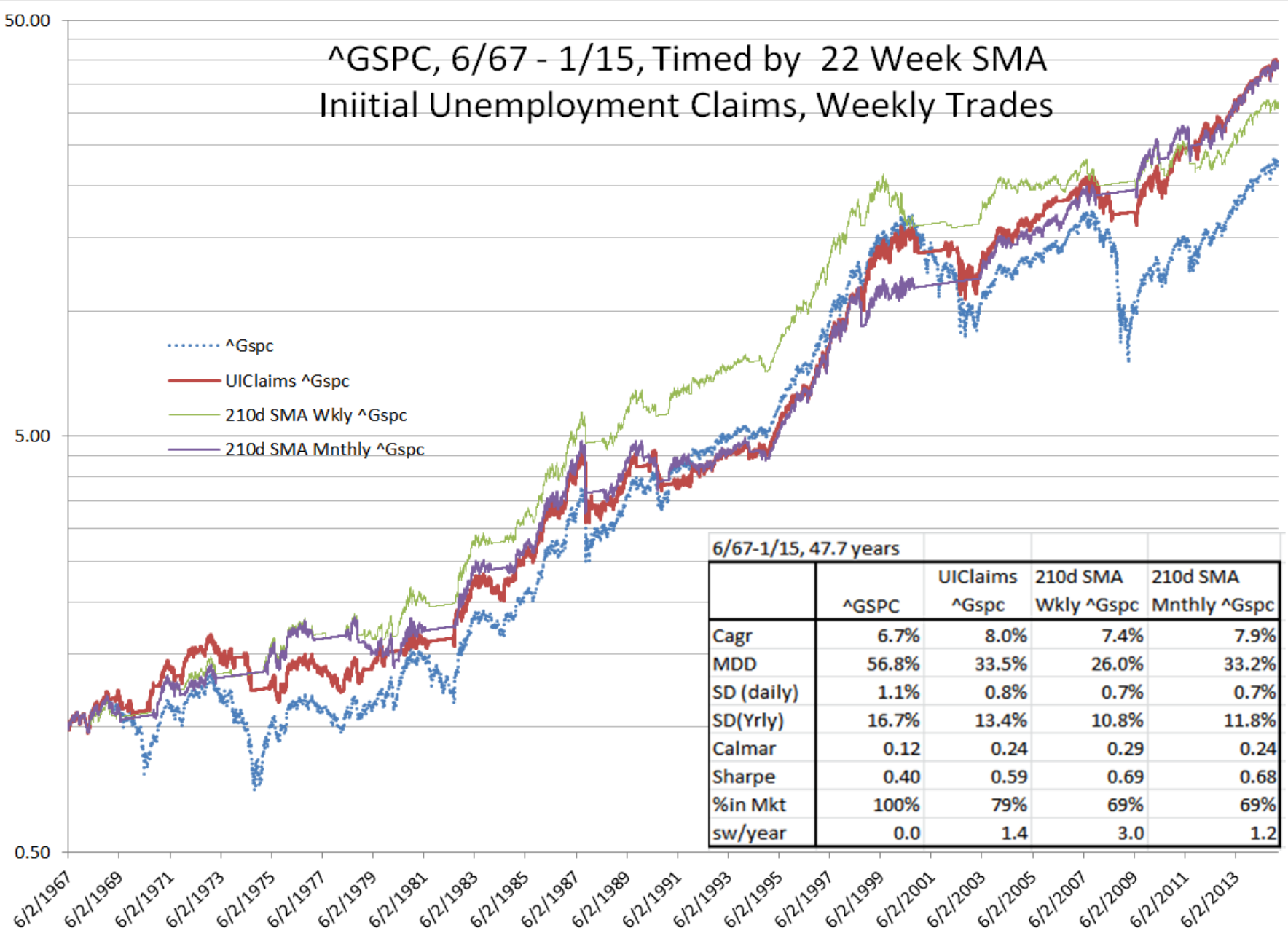
- Basic Alg
 - Buy and Sell Rules
 - Form a 22 week simple moving average of the Seasonally Adjusted (SA) Initial Unemployment Claims.
 - These reports come out Thursday 8:30 AM Eastern time. You can get the historical data and the official announcements from the DoL at: www.workforcesecurity.doleta.gov/unemploy/data.asp
 - There is a one week time delay in reporting this data -- so you have to line up your backtest dates correctly,
 - Each week's report may revise the previous week's numbers. The historical data includes all revisions but you have to adjust for new revisions in real-time.
 - If the current SA Claims number is below 97% of the 22 week SMA then go long. (If unemployment is falling go long.)
 - If the current SA Claims number is above 112% of the 22 week SMA go to cash. (If unemployment is beginning to surge upwards go to cash.)
 - If neither of the above are true then remain in the state you're in (i.e., stay long or flat)
 - Trades: Weekly
 - Implementation comments: Started March '15

Initial Unemployment Claims Timer

- General Info

- I modeled trading at end of day Friday - but you could model earlier entrances/exits
- The author's back test of the system split history into 2 segments: The first half ('67 - '89) to optimize the parameters and the second half ('89-'14) as the out-of-sample test period.
- If you vary the buy and sell ratios over the entire '67-'14 time period you'll find that there is a stable region of 93%-97% for the buy ratio and 110-120% for the sell ratio that produces CAGRs in the 7.7%-8.0% range and Sharpes in the 0.59-0.63 range.
- The IUClaims timer is in the market more often -- 79% of the time vs 69% for the 210 day SMA -- which hurts its SD

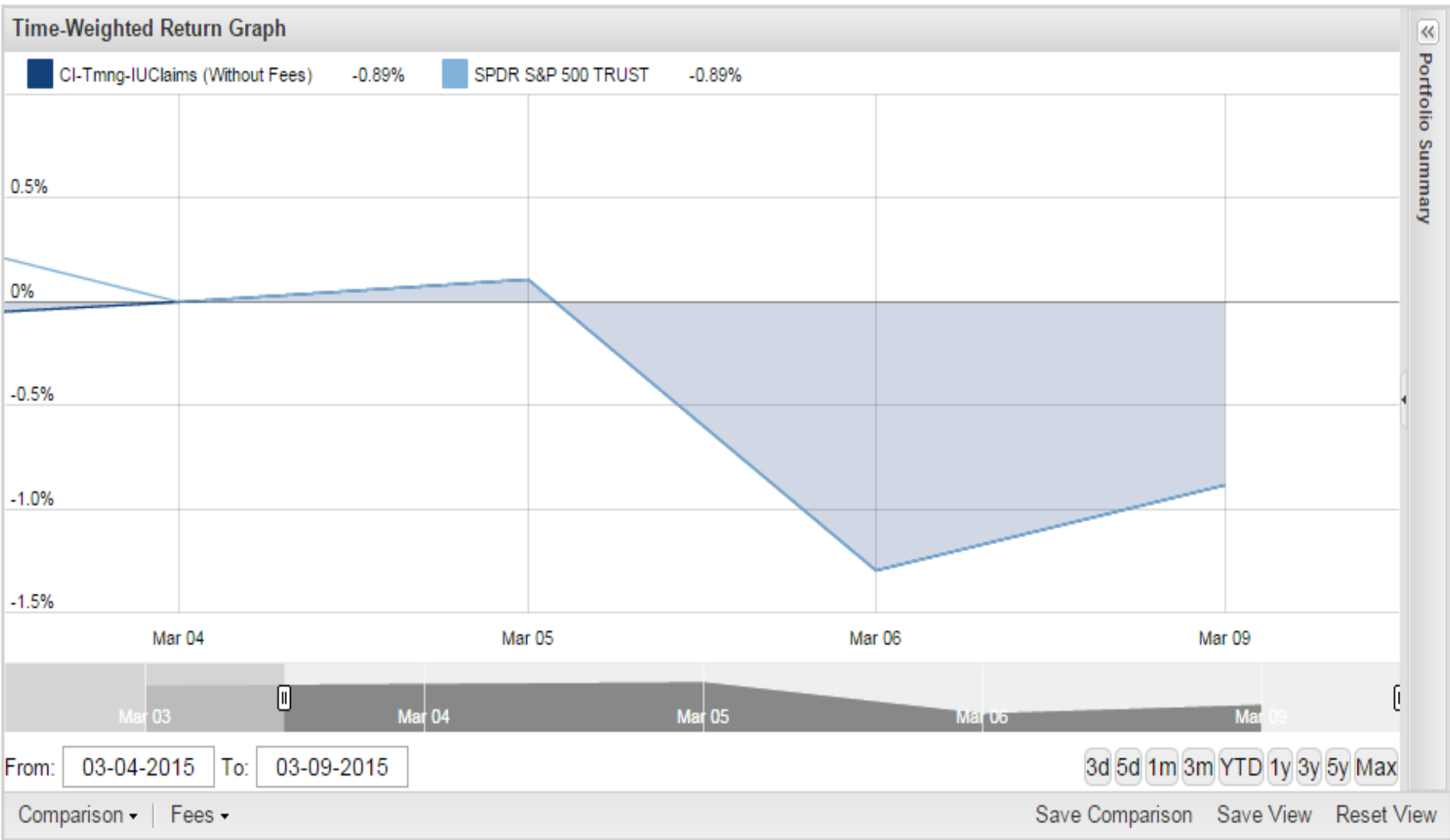
^GSPC, 6/67 - 1/15, Timed by 22 Week SMA Initial Unemployment Claims, Weekly Trades



6/67-1/15, 47.7 years				
	^GSPC	UIClaims ^Gspc	210d SMA Wkly ^Gspc	210d SMA Mnthly ^Gspc
Cagr	6.7%	8.0%	7.4%	7.9%
MDD	56.8%	33.5%	26.0%	33.2%
SD (daily)	1.1%	0.8%	0.7%	0.7%
SD(Yrly)	16.7%	13.4%	10.8%	11.8%
Calmar	0.12	0.24	0.29	0.24
Sharpe	0.40	0.59	0.69	0.68
%in Mkt	100%	79%	69%	69%
sw/year	0.0	1.4	3.0	1.2

Performance: CI-Tmng-IUClaims

Change View to: CI-Tmng-IUClaims




Portfolio Summary

Folio Holdings: CI-Tmng-IUClaims

[Quick Links](#) ▾

Change View to:

[View Guide](#)  for customizable table functionality.

Holdings Summary						
	Securities	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Gain %
Totals	1	\$195.19	(\$3.22)	(1.62%)	(\$4.81)	(2.40%)

Holdings										Expand View	Reset View
Symbol	Company Name	Shares	Last Price	Price Change	Market Value	Day's Gain	Day's Gain %	Position Gain	Position Ga	Current Weight	
SPY	SPDR S&P 500 TRUST	0.95224	\$204.98	(\$3.38)	\$195.19	(\$3.22)	(1.62%)	(\$4.81)	(2.40%)	100.00%	

More on the UIS

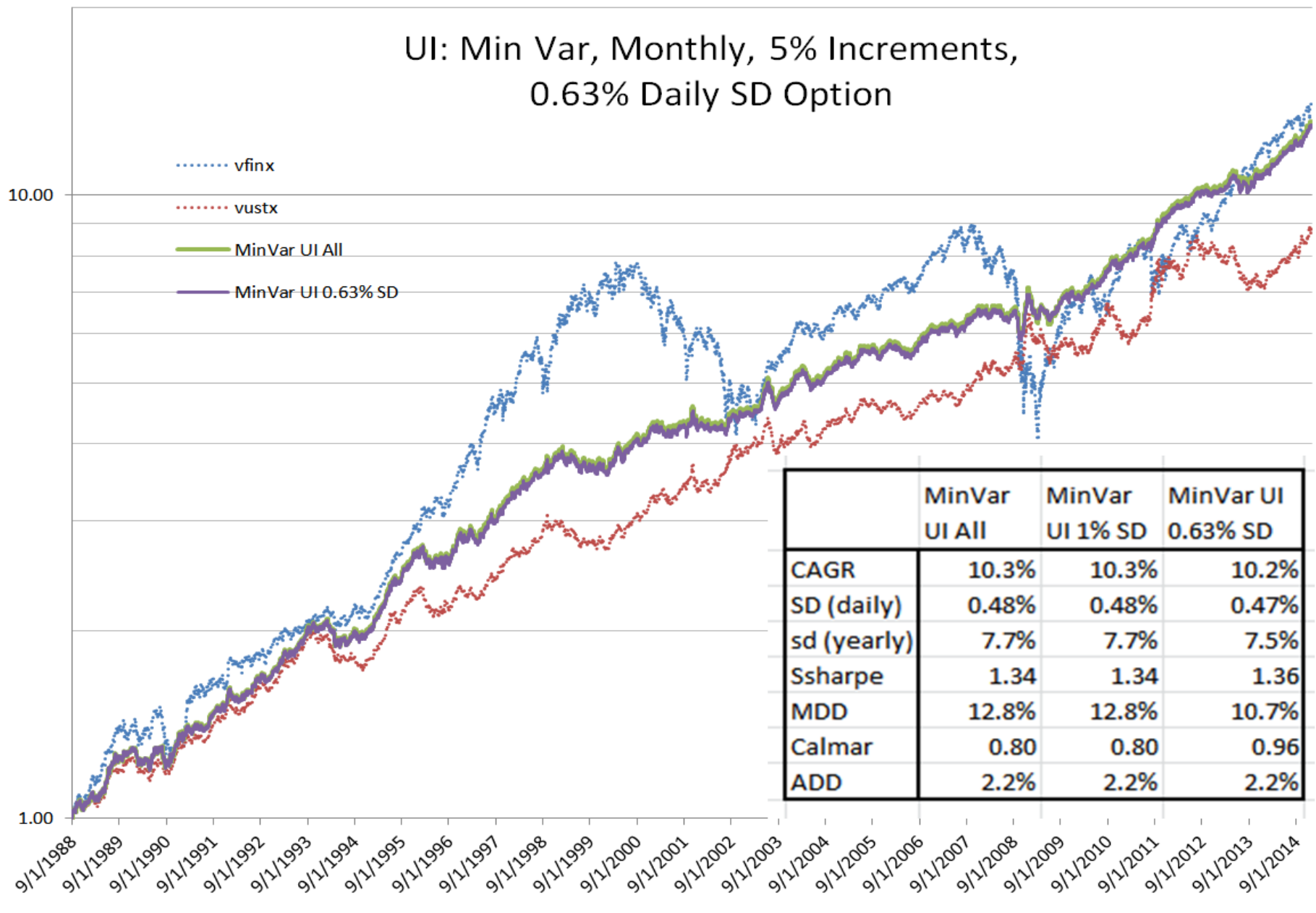
(A1 Z)

- Backtest to 1988
- Varan's Variation
- Other Indices (NAESX, QQQ, XLB)

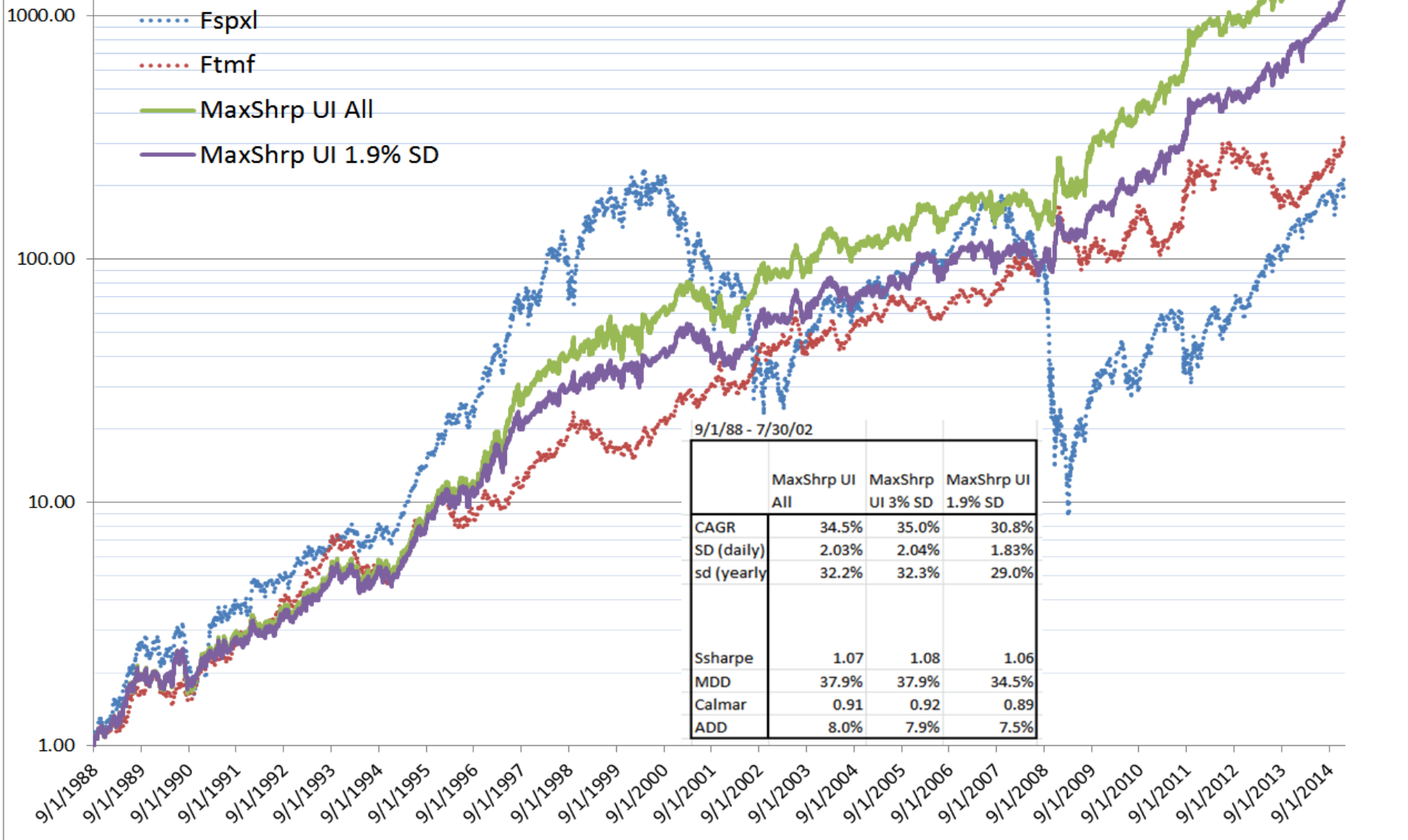
UIS Backtest to 1988

- One of my action items from the January meeting was to look at a longer back test of the UIS alg employing mutual funds.
 - I used Vustx and Vfinx to go back to 1988. I used a simple 3x multiplier on daily gains for both these funds for the leveraged approach.
- The first slide shows the 1x MinVar approach -- the results are consistent with what was seen in the shorter 2002-2015 period.
- The second slide shows the 3x Max Sharpe approach -- again results are consistent with what was seen in the shorter 2002-2015 period.
- Be forewarned that Vustx is a better instrument to trade than TLT/TMF -- e.g., it experienced less dramatic gains/losses during the 2008-2009 crisis. However, trading it would be difficult due to Vanguard mutual fund trading restrictions. See slide 3.
- Slide 4 shows a new twist using the 210d (10 month) SMA
 - We use the 210 day SMA on the 3x Vfinx to time and switch between a 3x Vustx and a 3x Vfinx.
 - This results in very nice gains but nasty MDDs.
 - If you reduce leverage to approx. 1.2x -- in this case by using a 60% weight of Vfix each month -- you get a result with a 19% CAGR, a 1.19 Ssharpe and a 21% MDD.
 - Very nice -- but you are exposed to how well your timer performs and you have no coverage for "event risk" when you are long the Vfinx.

UI: Min Var, Monthly, 5% Increments, 0.63% Daily SD Option



UI: Max Sharpe, Monthly, 5% Increments, 1.9% Daily SD Option

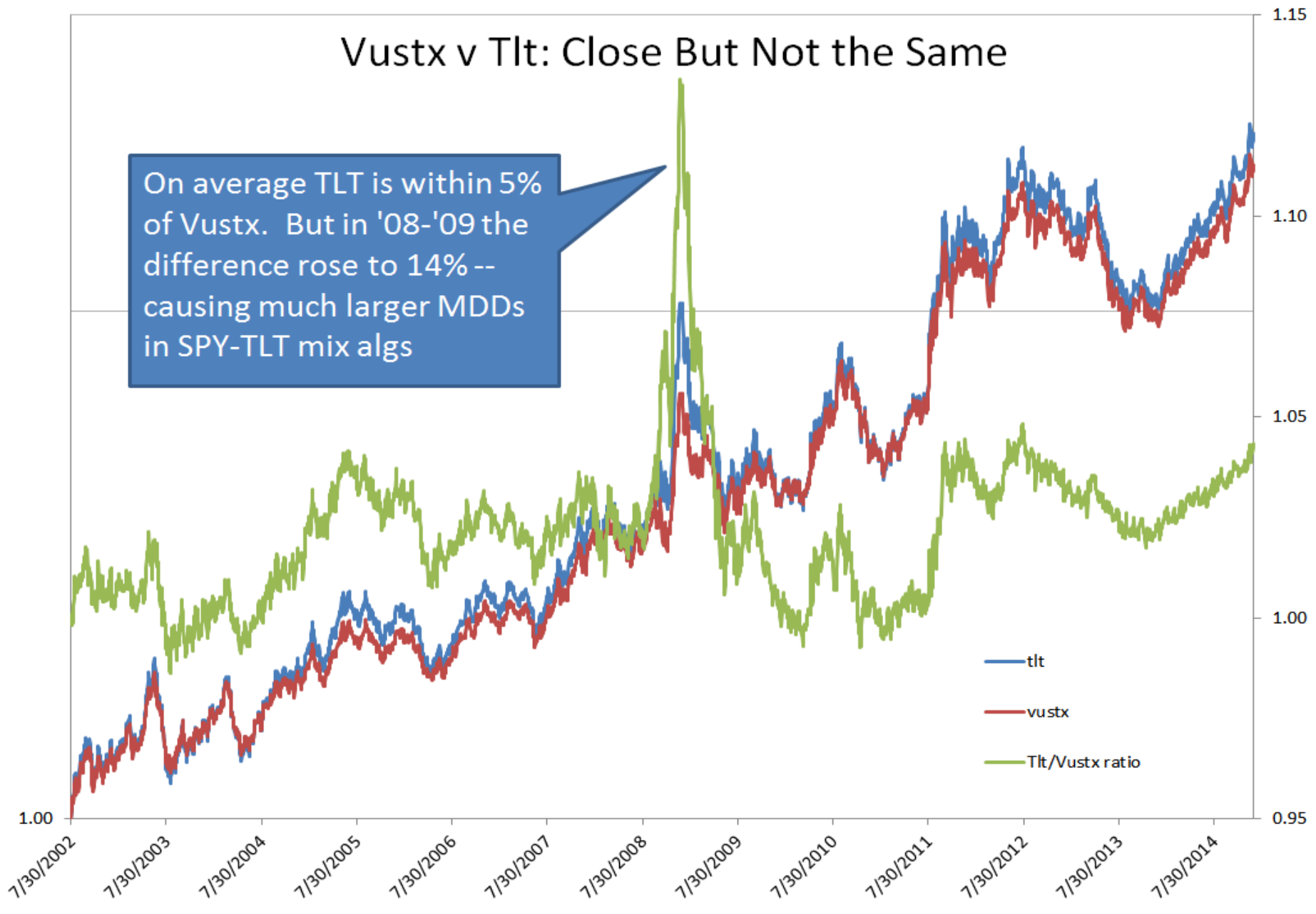


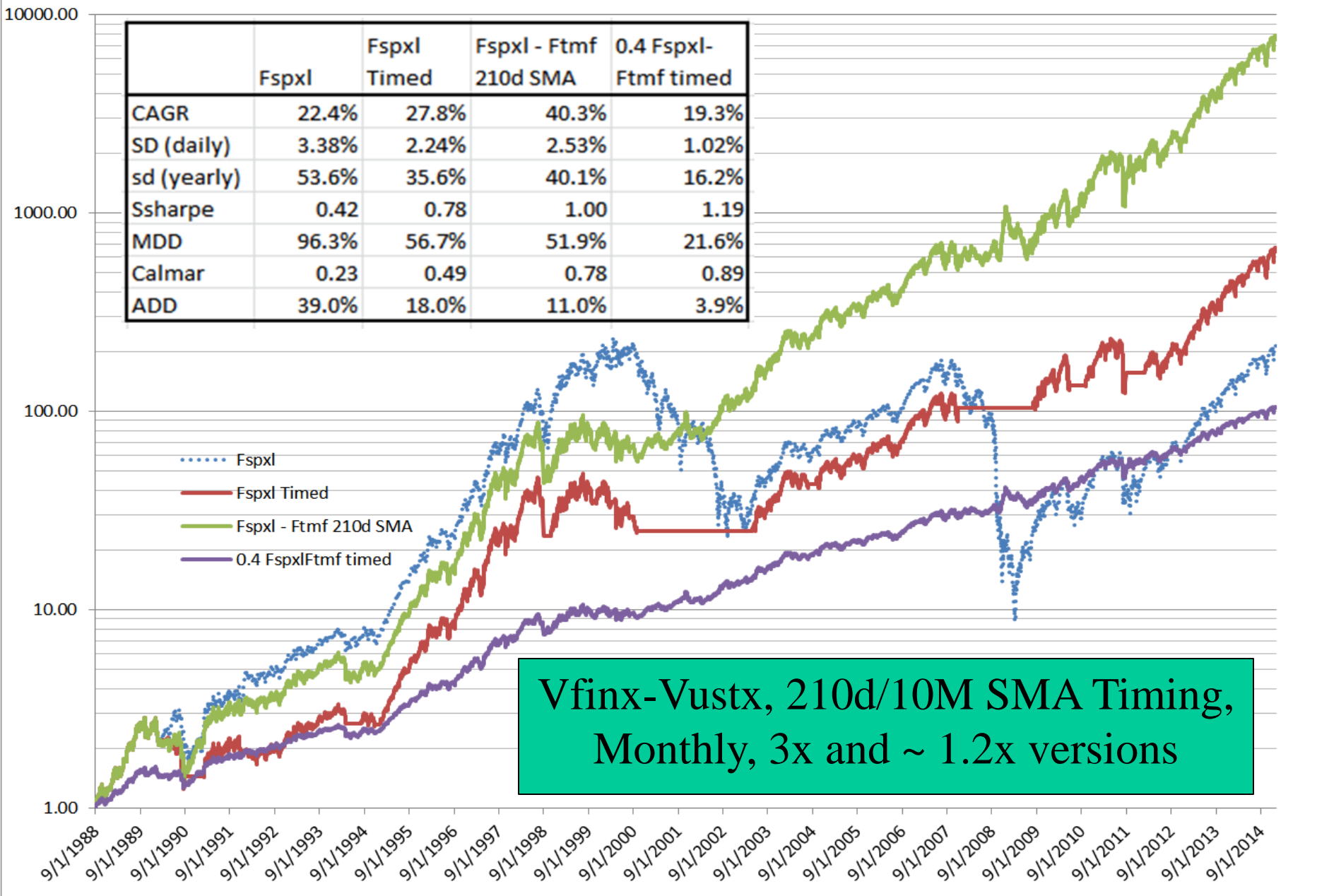
9/1/88 - 7/30/02

	MaxShrp UI All	MaxShrp UI 3% SD	MaxShrp UI 1.9% SD
CAGR	34.5%	35.0%	30.8%
SD (daily)	2.03%	2.04%	1.83%
sd (yearly)	32.2%	32.3%	29.0%
Ssharpe	1.07	1.08	1.06
MDD	37.9%	37.9%	34.5%
Calmar	0.91	0.92	0.89
ADD	8.0%	7.9%	7.5%

Vustx v Tlt: Close But Not the Same

On average TLT is within 5% of Vustx. But in '08-'09 the difference rose to 14% -- causing much larger MDDs in SPY-TLT mix algs





	Fspxl	Fspxl Timed	Fspxl - Ftmf 210d SMA	0.4 Fspxl-Ftmf timed
CAGR	22.4%	27.8%	40.3%	19.3%
SD (daily)	3.38%	2.24%	2.53%	1.02%
sd (yearly)	53.6%	35.6%	40.1%	16.2%
Ssharpe	0.42	0.78	1.00	1.19
MDD	96.3%	56.7%	51.9%	21.6%
Calmar	0.23	0.49	0.78	0.89
ADD	39.0%	18.0%	11.0%	3.9%

Vfinx-Vustx, 210d/10M SMA Timing, Monthly, 3x and ~ 1.2x versions

Varan's UIS Variation: Naïve Graham

- From Varan's Seeking Alpha post (pointed out by MJB)
 - <http://seekingalpha.com/instablog/709762-varan/2990923-naive-graham-passive-investing-according-to-the-master>
 - “In a 1963 lecture on the subject of *Securities in an Insecure World*, Benjamin Graham, ... asserted that diversification between stocks and bonds was the true source of excess returns compared to the market. Specifically, he advised that the relative allocation to stocks and bonds should be between 25% and 75% ...depending on the current state of the markets...”
 - Yes, this was 52 years ago... cutting edge stuff
- **From Varan: The Method for Two Fund Baskets**
 - Applies to a basket of two funds, one a stock fund, and the other a bond fund
 - On the first trading day of every *quarter*, rank the two funds on the basis of their total return during the prior *quarter*
 - Allocate 75% of the portfolio to the top ranked ETF and 25% to the other

Varan's UIS Variation: Naïve Graham

Funds	CAGR (%)	Sharpe Ratio (Sortino)	Max. Drawdown (%)	Min. Annual Return (%)
2003-2013 Two Fund Baskets				
VTI TLT (Market)	12.7	1.1 (2.0)	14.3	3.0
IJJ TLT (Mid Cap Value)	12.8	1.0 (1.9)	14.3	4.6
IJS TLT (Small Cap Value)	13.1	1.0 (1.9)	15.4	2.9
DFSVX	13.7	0.6 (1.1)	61.2	-36.8
PRWCX	10.4	0.8 (1.2)	36.6	-27.2

- I put together a quick backtest of Varan's 75%-25% 3 Month Gain alg
 - Results are shown in the next slides
 - I used Vustx for TLT and Vfinx for Spy to get a back test period back to '88
 - Also I switched monthly not quarterly. Per Varan, this makes little difference -- but I prefer monthly to respond to the market more quickly.

UIS: Min Var v Max Sharpe v Varan 75%-25%, Monthly

MV & MS in 5% Increments

- MinVar UI All
- MaxShrp UI All
- Vfinx 3M Win - 75% Vfinx

10

1

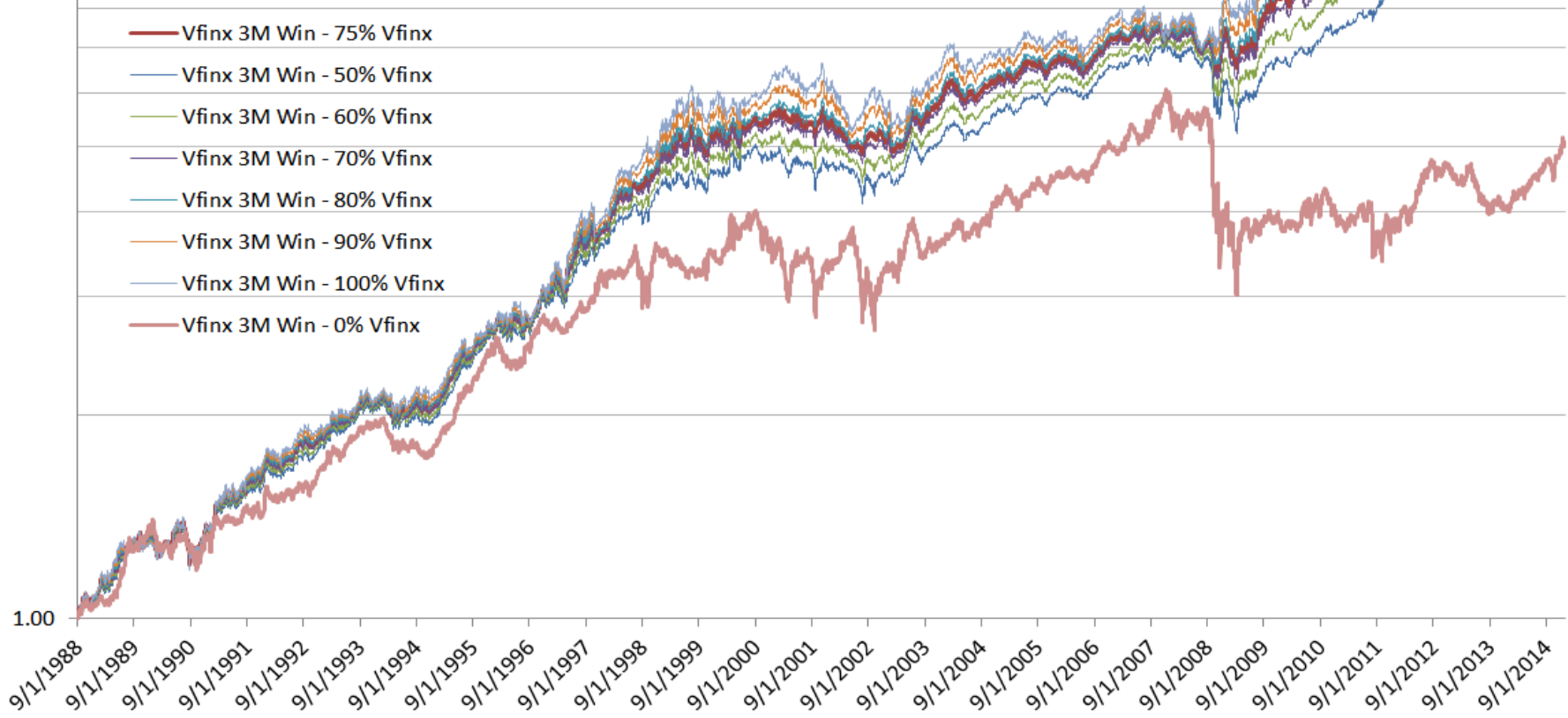
9/1/1988 9/1/1989 9/1/1990 9/1/1991 9/1/1992 9/1/1993 9/1/1994 9/1/1995 9/1/1996 9/1/1997 9/1/1998 9/1/1999 9/1/2000 9/1/2001 9/1/2002 9/1/2003 9/1/2004 9/1/2005 9/1/2006 9/1/2007 9/1/2008 9/1/2009 9/1/2010 9/1/2011 9/1/2012 9/1/2013 9/1/2014

	Varan 0.75 Vfinx- Vustx	MaxShrp UI All	MinVar UI All
CAGR	11.5%	11.8%	10.3%
SD (daily)	0.61%	0.68%	0.48%
sd (yearly)	9.7%	10.8%	7.7%
Ssharpe	1.19	1.09	1.34
MDD	14.8%	14.2%	12.8%
Calmar	0.78	0.83	0.80
ADD	2.7%	2.5%	2.2%

UIS: Varan 50-100% Vfins/Mixes%-25%, Monthly

	Vfinx 3M Win - 0% Vfinx	Vfinx 3M Win - 10% Vfinx	Vfinx 3M Win - 20% Vfinx	Vfinx 3M Win - 30% Vfinx	Vfinx 3M Win - 40% 0% Vfinx	Vfinx 3M Win - 50% Vfinx	Vfinx 3M Win - 60% Vfinx	Vfinx 3M Win - 70% Vfinx	Vfinx 3M Win - 75% Vfinx	Vfinx 3M Win - 80% Vfinx	Vfinx 3M Win - 90% Vfinx	Vfinx 3M Win - 100% Vfinx
CAGR	6.4%	7.2%	7.9%	8.6%	9.3%	10.0%	10.6%	11.2%	11.5%	11.8%	12.4%	12.9%
SD (daily)	1.02%	0.90%	0.79%	0.70%	0.63%	0.58%	0.57%	0.59%	0.61%	0.64%	0.71%	0.80%
sd (yearly)	16.1%	14.3%	12.6%	11.1%	10.0%	9.3%	9.1%	9.4%	9.7%	10.1%	11.3%	12.7%
Ssharpe	0.39	0.50	0.63	0.77	0.93	1.08	1.17	1.20	1.19	1.16	1.09	1.01
MDD	50.5%	46.3%	41.7%	36.9%	31.8%	26.5%	21.2%	16.3%	14.8%	15.2%	17.8%	21.0%
Calmar	0.13	0.15	0.19	0.23	0.29	0.38	0.50	0.69	0.78	0.78	0.69	0.61
ADD	12.0%	9.4%	6.8%	5.2%	3.9%	3.1%	2.7%	2.6%	2.7%	2.8%	3.2%	3.8%

10.00



Varan's UIS Variation: Naïve Graham

- **Varan: The Method for Six Fund Baskets**

- Applies to a basket of six funds, half being stock funds, and the rest bond funds.
- On the first trading day of every quarter, rank the six funds on the basis of their total return during the prior quarter.
- Allocate the following percentages of the portfolio to the various funds according to their ranks:

Rank	Weight (%)
1	35
2	25
3	15
4	12
5	8
6	5

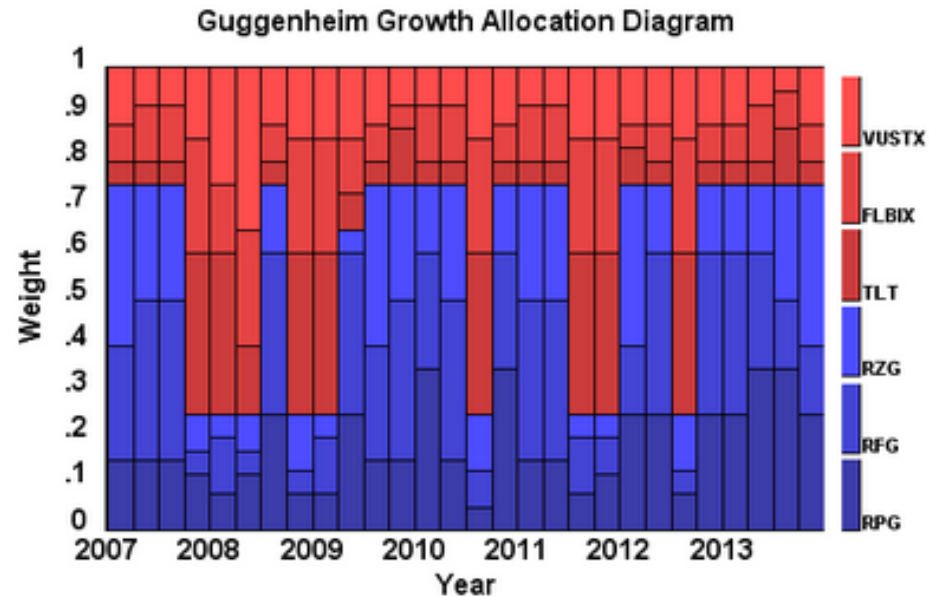
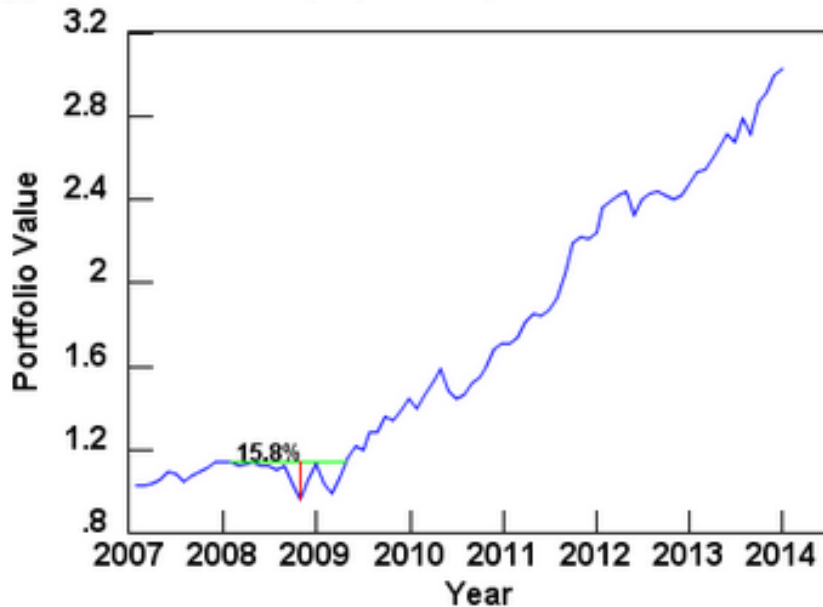
- **The following equity ETFs were used in the various baskets:**

- Guggenheim Value: RPV RFV RZV
- Guggenheim Growth: RPG RFG RZG
- Vanguard Value: VTV VOE VBR
- Vanguard Growth: VUG VOT VBK

Varan's UIS Variation: Naïve Graham

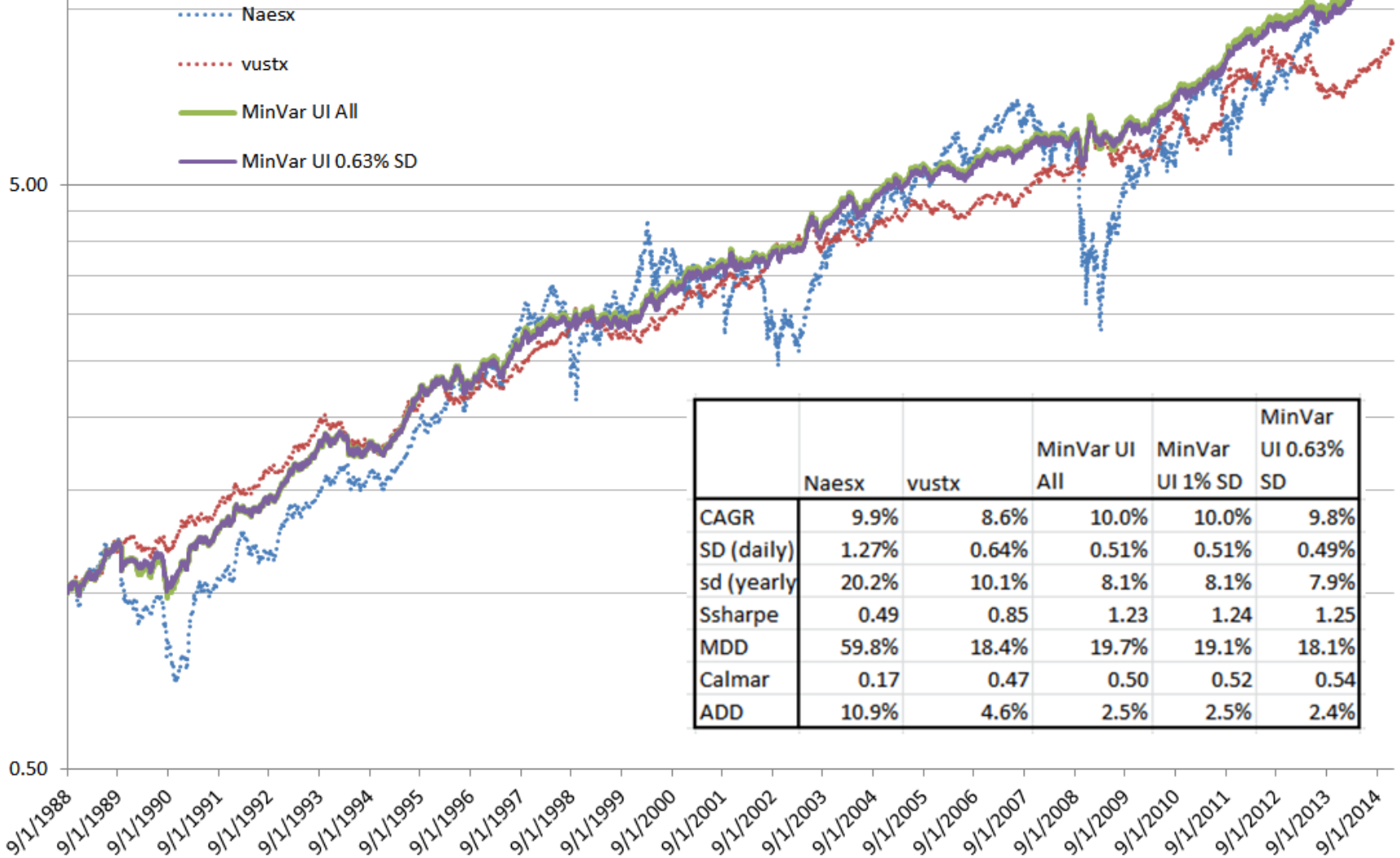
- The main advantage of this strategy is that the allocation is determined without any complex computations, in sharp contrast to the other methods such as risk parity or the maximum diversified portfolio algorithm, and yet the returns are quite satisfactory.
- As an example, the equity growth curve and the allocation diagram for the Guggenheim Growth basket are shown in the following figures.

Guggenheim Growth Equity Curve (Growth of \$1 invested on 1/1/2007)



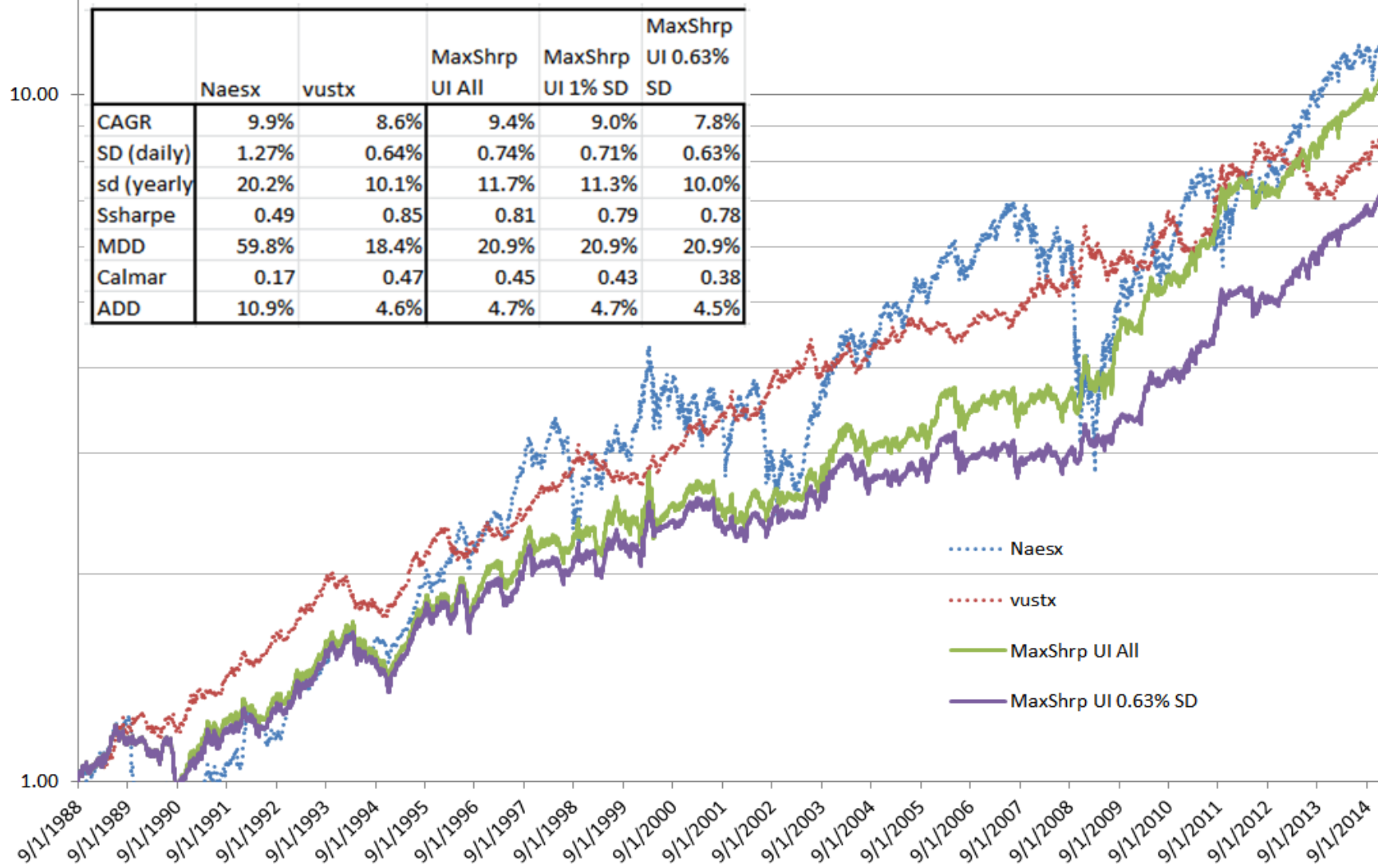
Other Indices: NAESX

UI: Min Var, Monthly, 5% Increments, 0.63% Daily SD Option



	Naesx	vustx	MinVar UI All	MinVar UI 1% SD	MinVar UI 0.63% SD
CAGR	9.9%	8.6%	10.0%	10.0%	9.8%
SD (daily)	1.27%	0.64%	0.51%	0.51%	0.49%
sd (yearly)	20.2%	10.1%	8.1%	8.1%	7.9%
Ssharpe	0.49	0.85	1.23	1.24	1.25
MDD	59.8%	18.4%	19.7%	19.1%	18.1%
Calmar	0.17	0.47	0.50	0.52	0.54
ADD	10.9%	4.6%	2.5%	2.5%	2.4%

UI: Max Sharpe, Monthly, 5% Increments, 0.63% Daily SD Option



UI: Max Sharpe - Min Var, Monthly, 5%
 Increments, 0.63% Daily SD Option

	Naesx	vustx	MS-MV UI All	MS-MV UI 1% SD EC	MS-MV UI 0.63% SD
CAGR	9.9%	8.6%	9.1%	8.7%	7.4%
SD (daily)	1.27%	0.64%	0.71%	0.69%	0.61%
sd (yearly)	20.2%	10.1%	11.2%	10.9%	9.7%
Ssharpe	0.49	0.85	0.81	0.80	0.77
MDD	59.8%	18.4%	22.3%	22.3%	22.0%
Calmar	0.17	0.47	0.41	0.39	0.34
ADD	10.9%	4.6%	4.9%	4.8%	4.5%

10.00

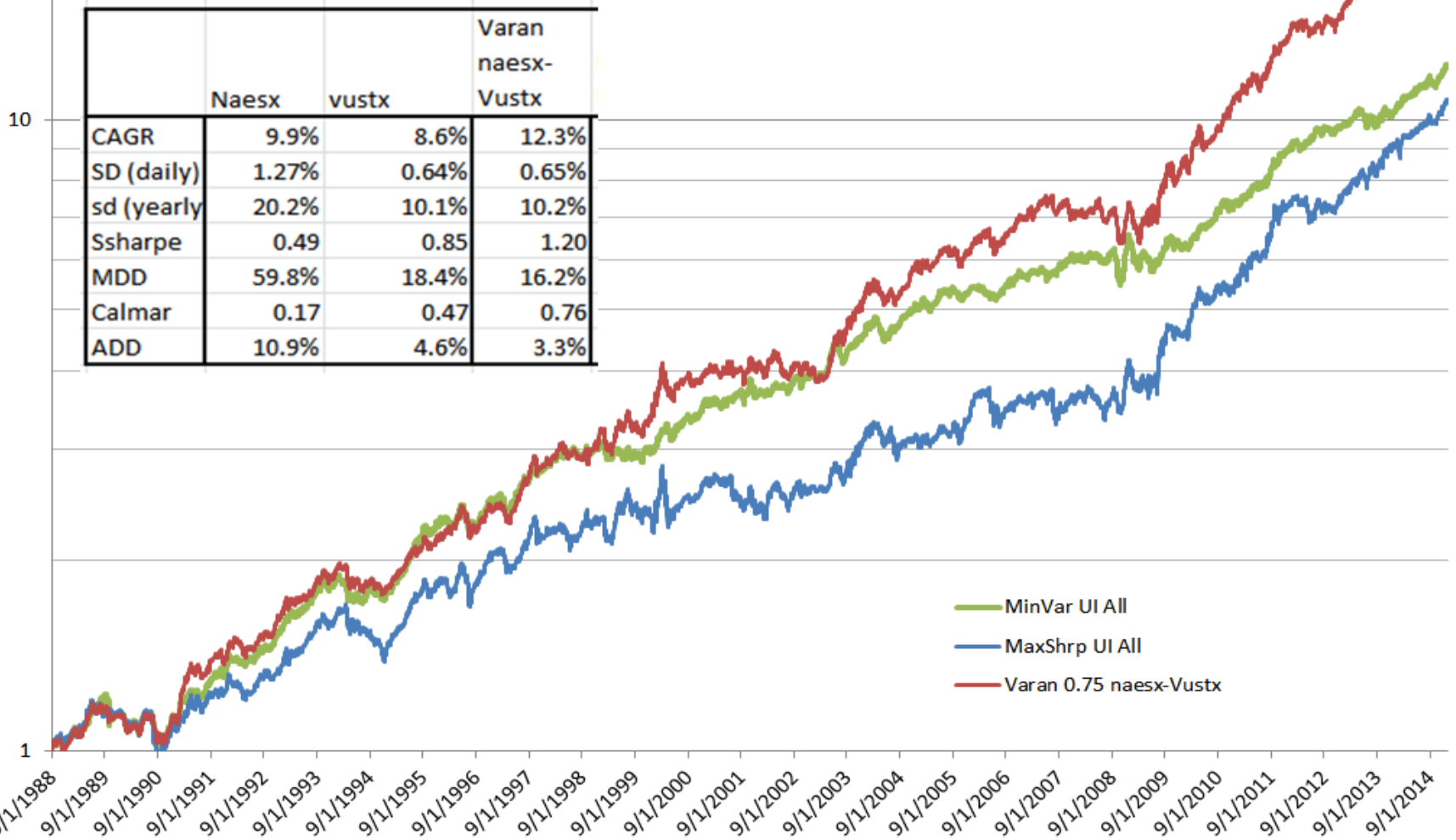
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9/1/1988 9/1/1989 9/1/1990 9/1/1991 9/1/1992 9/1/1993 9/1/1994 9/1/1995 9/1/1996 9/1/1997 9/1/1998 9/1/1999 9/1/2000 9/1/2001 9/1/2002 9/1/2003 9/1/2004 9/1/2005 9/1/2006 9/1/2007 9/1/2008 9/1/2009 9/1/2010 9/1/2011 9/1/2012 9/1/2013 9/1/2014

- Naesx
- vustx
- MS-MV UI All
- MS-MV UI 0.63% SD

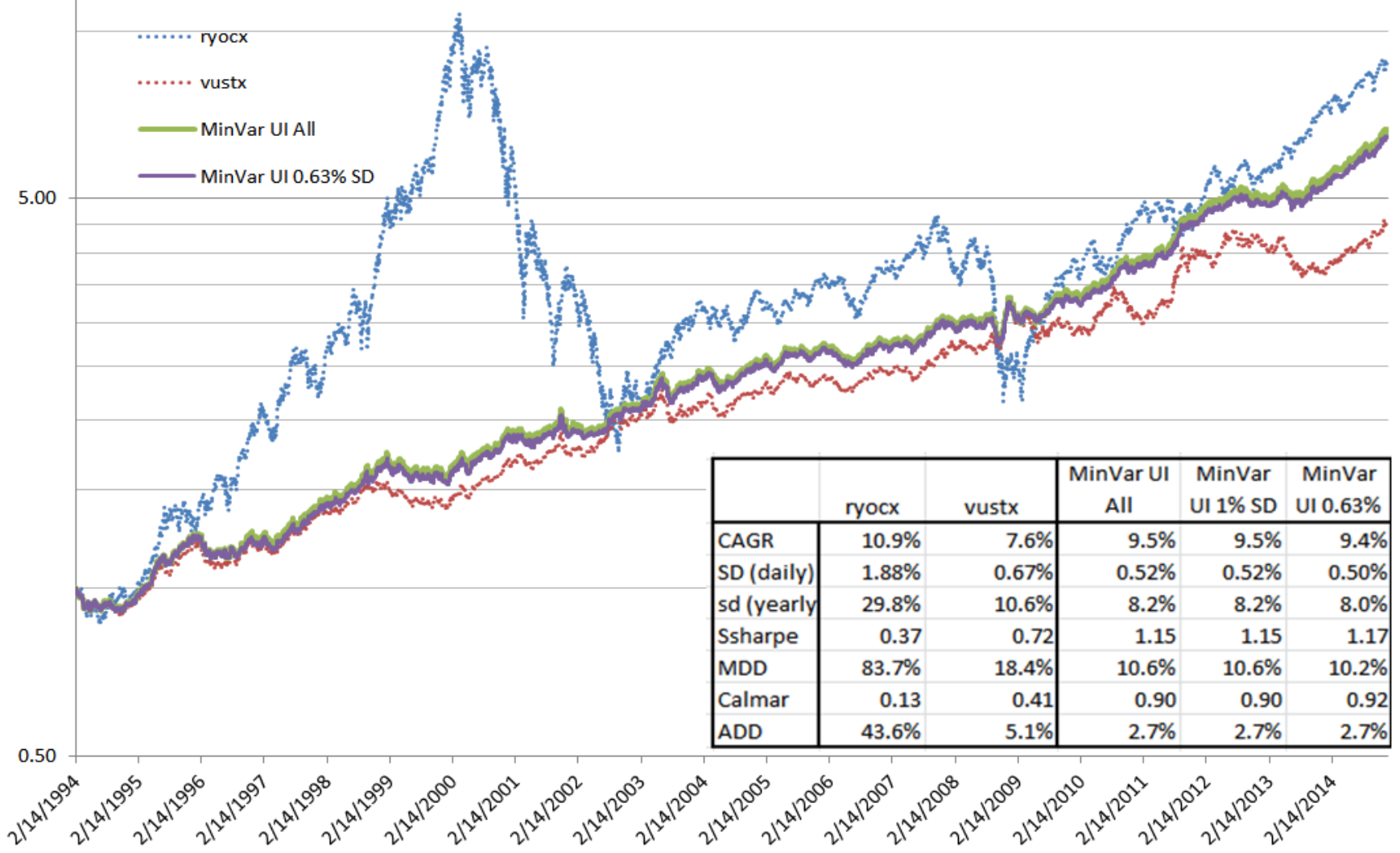
Naesx-Vustx: Min Var v Max Sharpe v Varan 75%-25%, Monthly

MV & MS in 5% Increments



Other Indices: QQQ

UIS QQQ-TLT: Min Var, Monthly, 5% Increments, 0.63% Daily SD Option

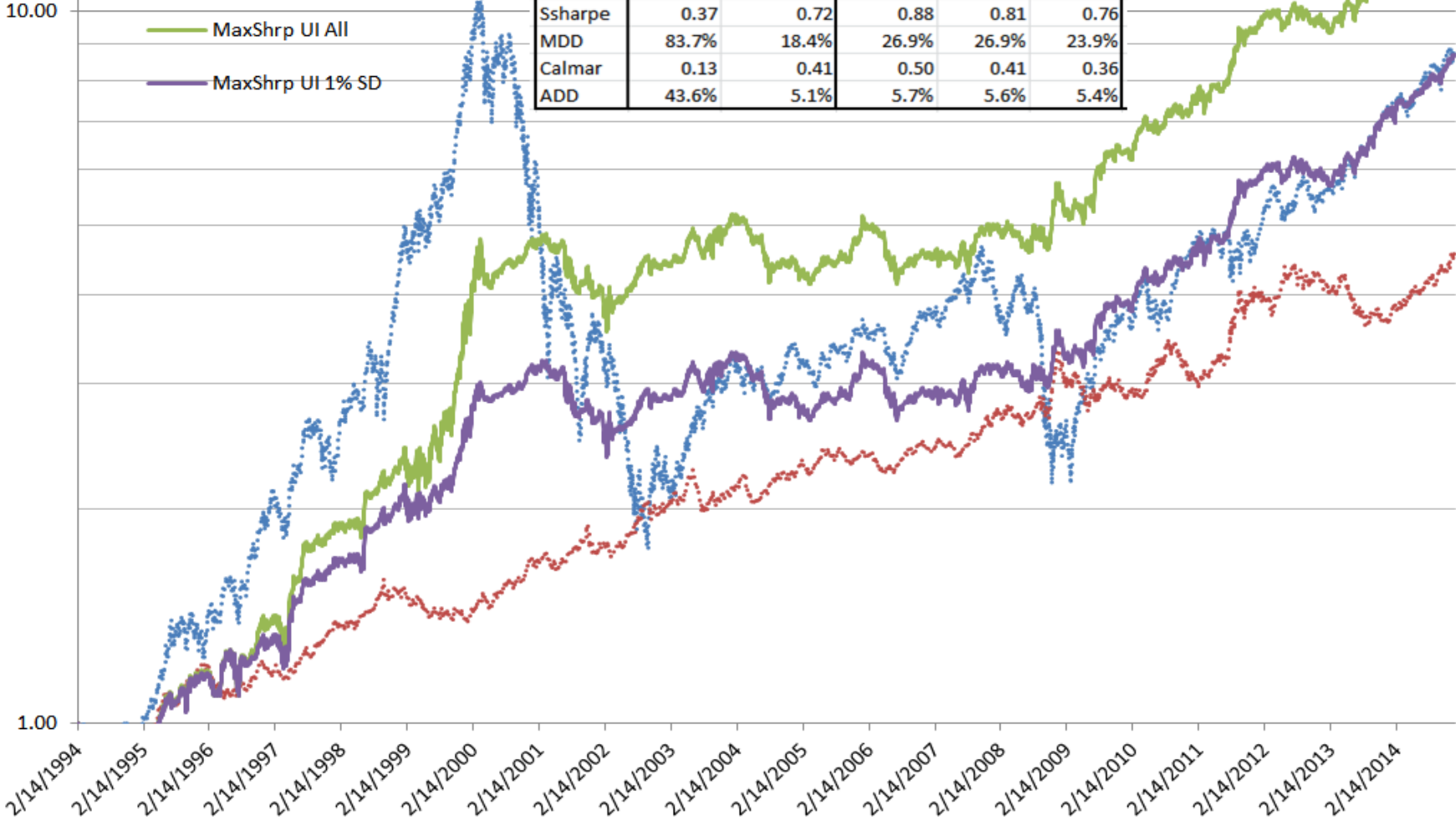


	ryocx	vustx	MinVar UI All	MinVar UI 1% SD	MinVar UI 0.63%
CAGR	10.9%	7.6%	9.5%	9.5%	9.4%
SD (daily)	1.88%	0.67%	0.52%	0.52%	0.50%
sd (yearly)	29.8%	10.6%	8.2%	8.2%	8.0%
Ssharpe	0.37	0.72	1.15	1.15	1.17
MDD	83.7%	18.4%	10.6%	10.6%	10.2%
Calmar	0.13	0.41	0.90	0.90	0.92
ADD	43.6%	5.1%	2.7%	2.7%	2.7%

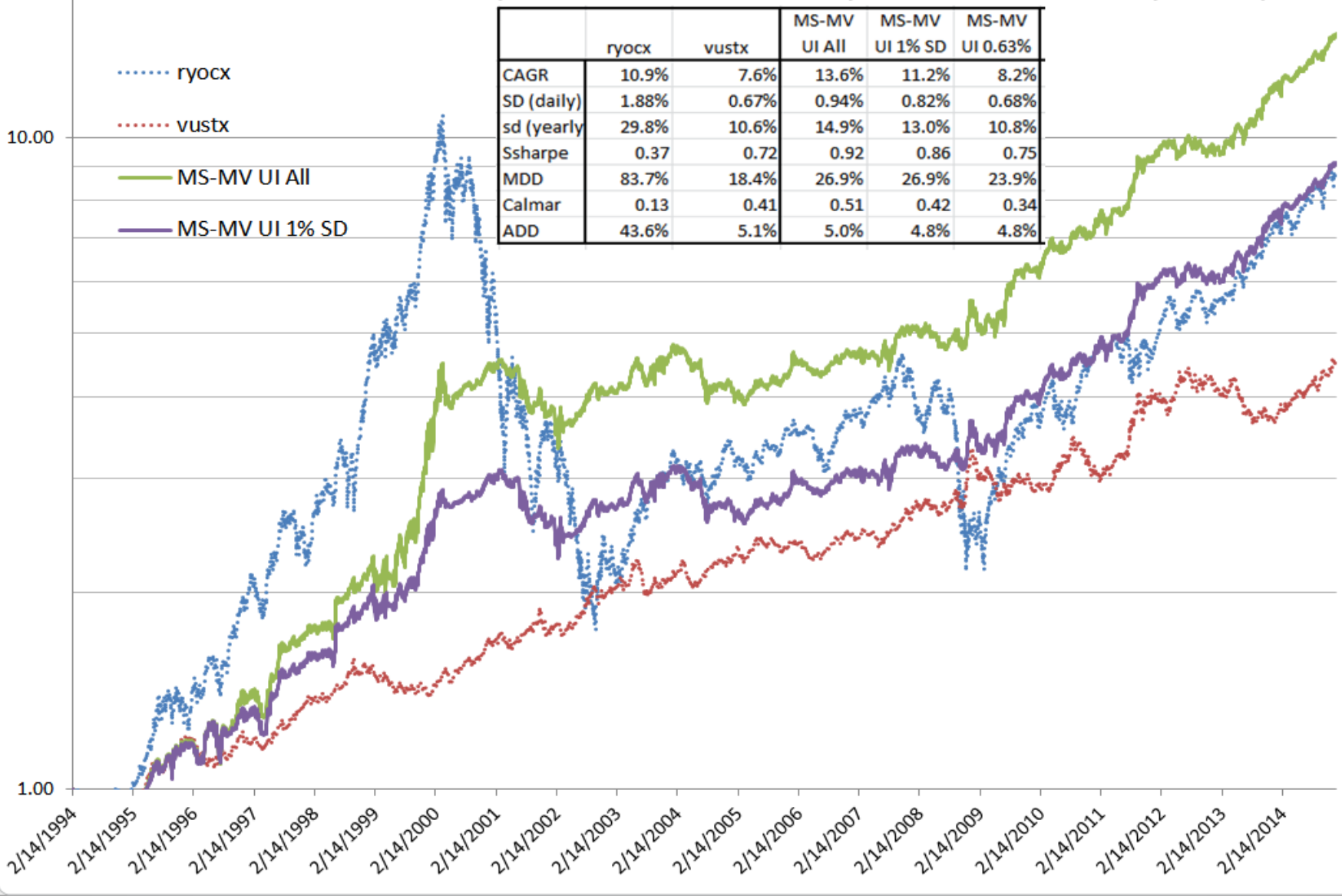
UIS QQQ-TLT: Max Sharpe, Monthly, 5% Increments, 1% Daily SD Option

- ryocx
- vustx
- MaxShrp UI All
- MaxShrp UI 1% SD

	ryocx	vustx	MaxShrp UI All	MaxShrp UI 1% SD	MaxShrp UI 0.63%
CAGR	10.9%	7.6%	13.6%	10.9%	8.6%
SD (daily)	1.88%	0.67%	0.97%	0.85%	0.72%
sd (yearly)	29.8%	10.6%	15.4%	13.4%	11.4%
Ssharpe	0.37	0.72	0.88	0.81	0.76
MDD	83.7%	18.4%	26.9%	26.9%	23.9%
Calmar	0.13	0.41	0.50	0.41	0.36
ADD	43.6%	5.1%	5.7%	5.6%	5.4%



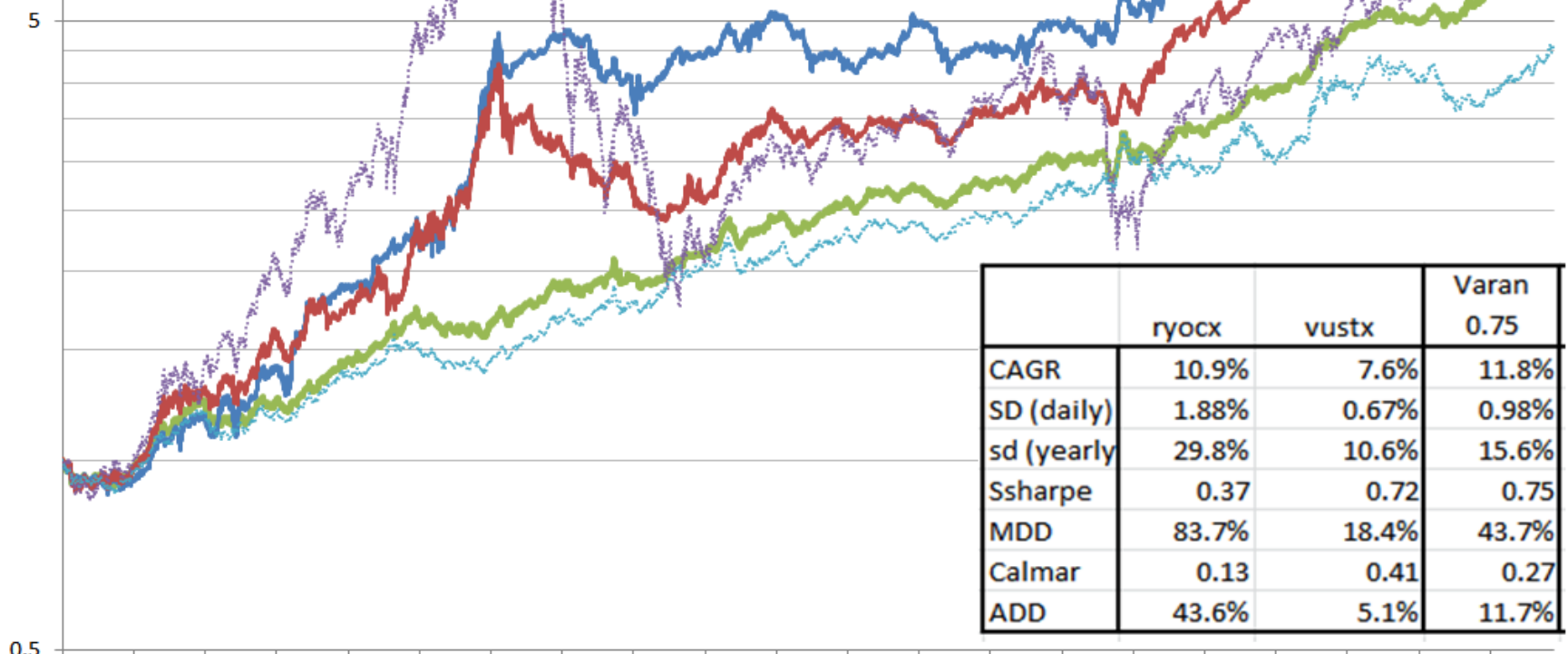
UIS QQQ-TLT: Max Sharpe - Min Var, Monthly, 5% Incr, 1% Daily SD Option



UIS QQQ-TLT: Min Var v Max Sharpe v Varan 75%-25%, Monthly

MV & MS in 5% Increments

- MinVar UI All
- MaxShrp UI All
- Varan 0.75 ryocx-Vustx
- ⋯ ryocx
- ⋯ vustx

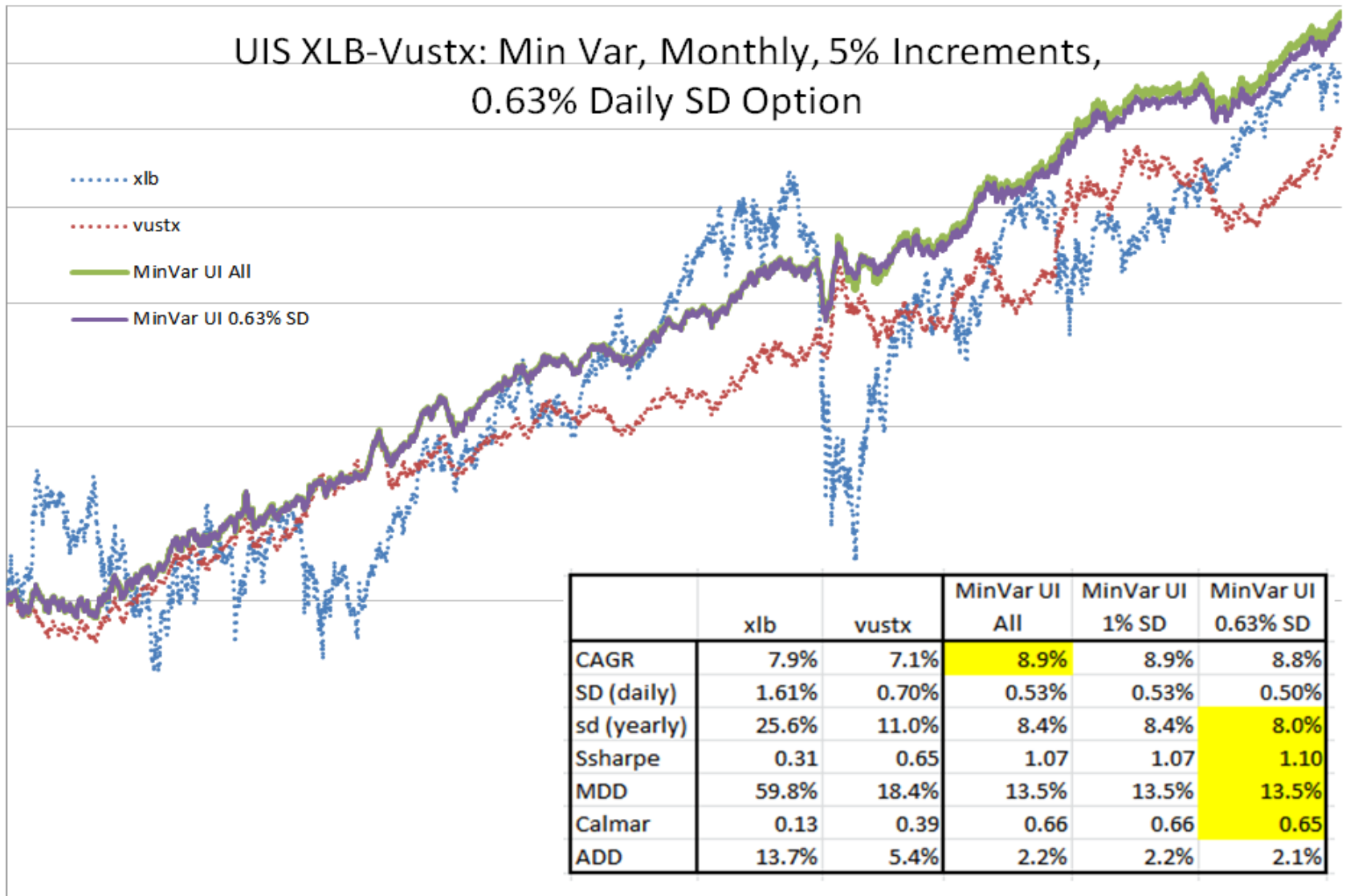


	ryocx	vustx	Varan 0.75
CAGR	10.9%	7.6%	11.8%
SD (daily)	1.88%	0.67%	0.98%
sd (yearly)	29.8%	10.6%	15.6%
Ssharpe	0.37	0.72	0.75
MDD	83.7%	18.4%	43.7%
Calmar	0.13	0.41	0.27
ADD	43.6%	5.1%	11.7%

Other Indices: XLB

UIS XLB-Vustx: Min Var, Monthly, 5% Increments, 0.63% Daily SD Option

- xlb
- vustx
- MinVar UI All
- MinVar UI 0.63% SD



	xlB	vustx	MinVar UI All	MinVar UI 1% SD	MinVar UI 0.63% SD
CAGR	7.9%	7.1%	8.9%	8.9%	8.8%
SD (daily)	1.61%	0.70%	0.53%	0.53%	0.50%
sd (yearly)	25.6%	11.0%	8.4%	8.4%	8.0%
Ssharpe	0.31	0.65	1.07	1.07	1.10
MDD	59.8%	18.4%	13.5%	13.5%	13.5%
Calmar	0.13	0.39	0.66	0.66	0.65
ADD	13.7%	5.4%	2.2%	2.2%	2.1%

0.50

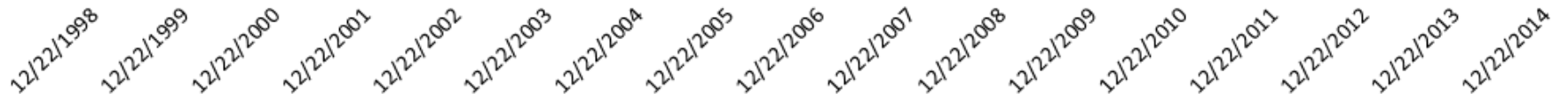
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UIS Xlb-Tlt: Max Sharpe, Monthly, 5% Increments, 1% Daily SD Option

5.00

- xlb
- vustx
- MaxShrp UI All
- MaxShrp UI 1% SD

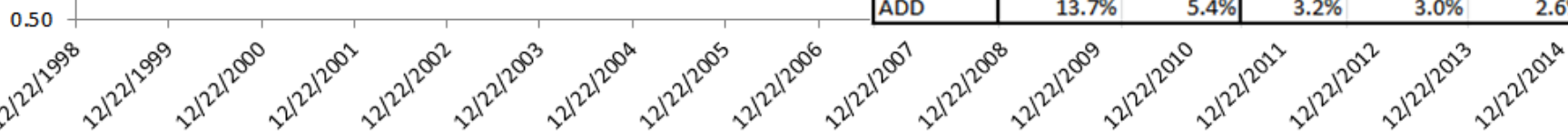
0.50



	xlb	vustx	MaxShrp UI All	MaxShrp UI 1% SD	MaxShrp UI 0.63%
CAGR	7.9%	7.1%	11.7%	11.1%	9.4%
SD (daily)	1.61%	0.70%	0.87%	0.82%	0.71%
sd (yearly)	25.6%	11.0%	13.8%	13.0%	11.3%
Ssharpe	0.31	0.65	0.84	0.85	0.83
MDD	59.8%	18.4%	25.4%	20.8%	17.1%
Calmar	0.13	0.39	0.46	0.53	0.55
ADD	13.7%	5.4%	5.6%	4.8%	3.9%

UIS XLB-TLT: Max Sharpe-Min Var, Monthly, 5% Incr, 1% Daily SD Option

..... xlb
..... vustx
—— MS-MV UI All
—— MS-MV UI 1% SD

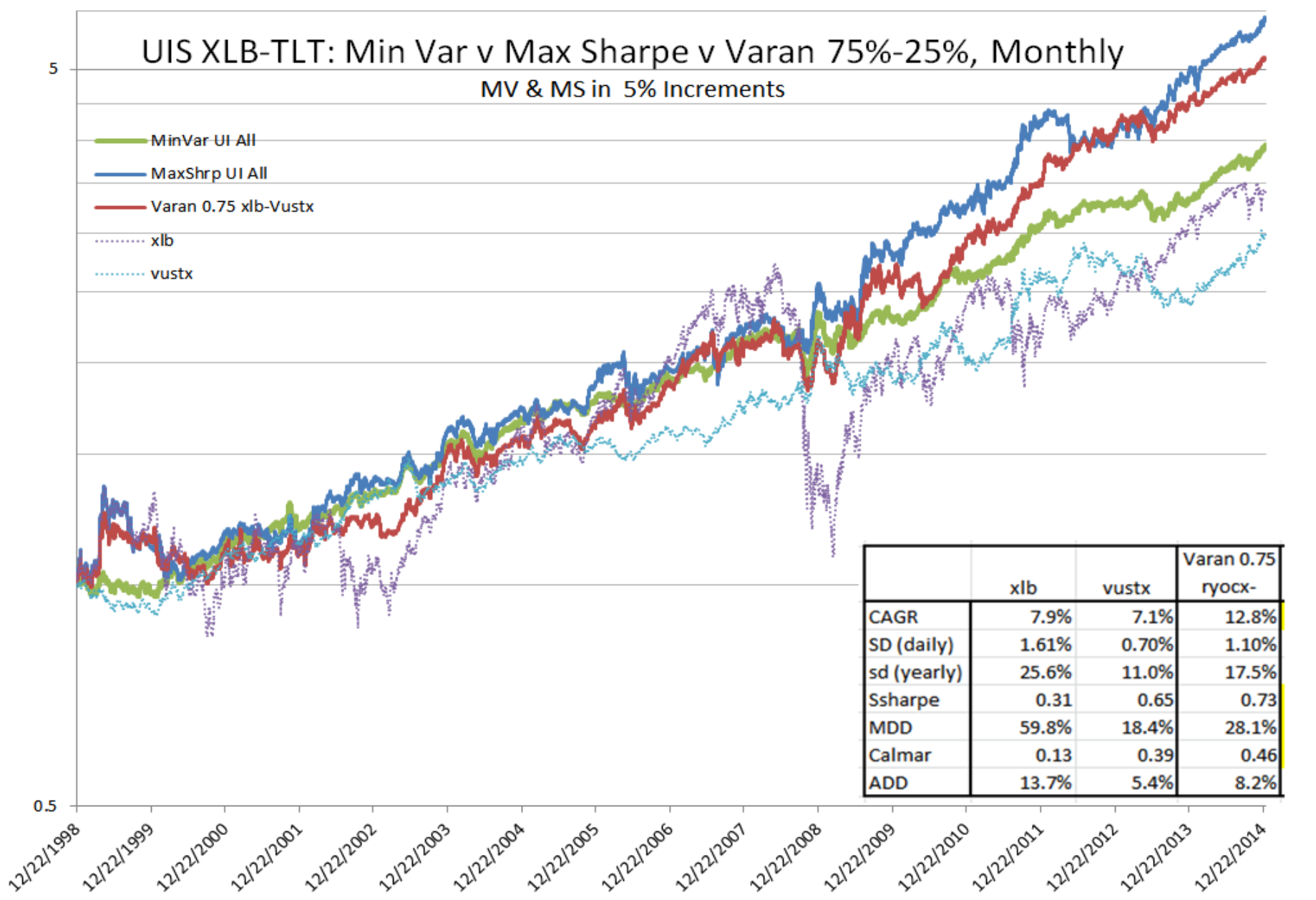


	xlb	vustx	MS-MV UI All	MS-MV UI 1% SD	MS-MV UI 0.63% SD
CAGR	7.9%	7.1%	12.9%	12.2%	10.4%
SD (daily)	1.61%	0.70%	0.83%	0.79%	0.68%
sd (yearly)	25.6%	11.0%	13.1%	12.5%	10.8%
Ssharpe	0.31	0.65	0.98	0.98	0.97
MDD	59.8%	18.4%	15.8%	15.8%	15.8%
Calmar	0.13	0.39	0.82	0.78	0.66
ADD	13.7%	5.4%	3.2%	3.0%	2.6%

UIS XLB-TLT: Min Var v Max Sharpe v Varan 75%-25%, Monthly

MV & MS in 5% Increments

- MinVar UI All
- MaxShrp UI All
- Varan 0.75 xlb-Vustx
- xlb
- vustx



	xlb	vustx	Varan 0.75 ryocx-
CAGR	7.9%	7.1%	12.8%
SD (daily)	1.61%	0.70%	1.10%
sd (yearly)	25.6%	11.0%	17.5%
Ssharpe	0.31	0.65	0.73
MDD	59.8%	18.4%	28.1%
Calmar	0.13	0.39	0.46
ADD	13.7%	5.4%	8.2%

Monthly Momentum on Sector Funds

(John N)

Portfolio Diagnostics

(Ilya F)

Reference Material

- Performance Metrics

Performance Metrics

EC	Equity Curve	Portfolio Value plotted against time
CRR	Compound Rate of Return	Reward Measurement -- Annualized compound, or geometric, rate of return
DD	Drawdown	Percentage difference in portfolio value on a given date from the maximum portfolio value on all prior dates
MDD	Maximum Drawdown	Risk Measurement - Maximum observed DD over all portfolio valuation dates
UI	Ulcer Index	Risk Measurement - Root Mean Square of the DD measurements for all portfolio evaluation dates. For each date, measure DD and square it. Then take the square root of the average of all the DD ² measurements. The result is the Ulcer Index where a high number means the portfolio has large drawdowns that take a long time to recover to a new portfolio high value.
UPI	Ulcer Performance Index	Reward to Risk Measure -- CRR / UI
CR	Calmar Ratio	Reward to Risk Measure -- CRR / MDD This measure is inferior to the UPI because a single large DD will result in a low Calmar Ratio forever

with permission, Michael Begley, informal notes

Performance Metrics: Examples

