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A Quantitative Strategy For Trading Inverse Volatility: Cycle 12 Update

Nov. 29, 2016 12:05 PM ET57 comments | Includes: SVX...

My first SA article, *A Quantitative Strategy For Trading Inverse Volatility With Impressive Backtested Results*, was published October 10, 2014. A follow up SA article, *Assessment Of A Quantitative Strategy For Trading Inverse Volatility 15 Months Later*, was published January 11, 2016. The present *Instablog* article both updates the progress of the strategy following the close of Cycle 12 on November 21, 2016, and provides refined parameters for ongoing cycles.

Results Based on the Original Parameters

The original model, which included only Cycles 1-10, was purely based on the backtesting of historical and model XIV prices, dating from March 2004 through July 2014. There have been only two "live" cycles since: Cycles 11-12. Results based on the originally published parameters are collected in Table 1. For details about the original parameter values, refer to the original articles.

Table 1. Historical and Synthetic Results with Original Parameters

cycle #	buy date / cycle start	sell date	cycle end	result	cumulative balance (10.00)	max cycle drawdown	months held	Cumulative CAGR since 03/30/04
1	3/30/04	11/10/04	11/10/04	133.49%	23.35	-1.10%	7.39	296.1%
2	4/19/05	3/30/06	3/30/06	133.95%	54.62	-5.60%	11.33	133.9%
3	6/1/06	3/5/07	9/29/08	47.55%	80.60	-23.80%	9.10	59.0%
4	12/11/08	10/22/09	10/22/09	132.87%	187.69	-6.20%	10.35	69.4%
5	11/2/09	4/20/10	4/20/10	138.11%	446.91	-0.50%	5.55	87.3%
6	5/12/10	1/14/11	1/14/11	135.69%	1,053.3	-31.50%	8.11	98.5%
7	3/16/11	8/4/11	9/9/11	12.77%	1,187.8	0.00%	4.63	90.0%
8	11/16/11	3/26/12	3/26/12	153.51%	3,011.3	-6.50%	4.30	104.3%
9	5/21/12	1/22/13	1/22/13	133.23%	7,023.2	-14.00%	8.08	110.3%
10	2/26/13	7/1/14	7/1/14	137.35%	16,670	-6.50%	16.10	106.2%
11	10/21/14	8/24/15	1/8/16	-9.65%	15,061	-23.73%	10.09	86.2%

12	2/17/16	6/24/16	11/21/16	21.48%	18,296	0.00%	4.21	81.1%
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Superficially, the results of the two live cycles is unimpressive. Between 10/31/14 and 11/21/16, the originally published strategy would have gained only 9.75% over a timeframe of slightly longer than two years. Nothing to write home about!

Successes and Failures in Cycles 11 and 12

From the strategy's standpoint, Cycle 11 was a complete success. From a financial standpoint, not so much-but that is not my focus here. Even though the cycle resulted in a loss of principal, two of the strategy's cornerstones were confirmed. 1. The trailing stop closed the position with less of a loss, compared to the absence of a trailing stop. 2. Following the trailing stop sell, the strategy required that the cycle would not be complete until the XIV price fell further, and closed below a predesignated level. History shows this to have been completely accurate. Cycle 11 did not close in the green; nevertheless, it validated the strategy's principles and expectations for a "losing" cycle.

On the other hand, Cycle 12 can be considered somewhat of a failure because, after the XIV position was exited via the trailing stop, its market price subsequently rose, and eventually closed above the limit sell price to close Cycle 12. In other words, the strategy prematurely stopped out what might have been a successful and profitable cycle. The cause? The trailing stop was too tight. Not by much, but "almost" only scores a point in the game of horseshoes.

Adjustment of Parameters Following Cycle 12

Development of the original model identified an optimal *range* of values for each parameter, and parameter values that represented the *midpoint* of each optimal range were published. In the first two articles, the optimal *ranges* were not discussed. In hind sight, the omission was a probably a mistake, because it may have resulted in an overly simplistic understanding and interpretation of the single-value parameters. The newly optimized ranges and recommended values of each parameter are discussed below.

The failure of Cycle 12 forced reevaluation of the trailing stop parameter. The newly optimized range has a small detrimental effect on the outcomes of

Cycles 3 and 7, relative to the original strategy parameters, but improves the model's outcomes via improvement in the outcome of Cycle 12.

Evaluation of the trailing stop trigger, *i.e.*, the price level that must be reached before the trailing stop is set into action, revealed a small, and possibly non-statistical effect on model outcomes. Thus, the trigger was eliminated as a parameter. As a result, the trailing stop is immediately activated at the beginning of each cycle.

The reoptimized parameter value ranges are collected in Table 2. The table also identifies a recommended trigger value within the optimized range. The updated strategy has only three optimized parameters. I know of no other objective, quantitative trading strategy having fewer than three parameters that remotely comes near the success of our strategy-based on the last 12.5 years of market data (Table 3, below). The criticism that the strategy is "over parameterized," which appears in some reader comments, is without intellectual or factual merit.

Table 2. Modified Parameters Following Cycle 12

New Cycle Trigger: The previous cycle must have been previously closed. Thereafter, the F1/F2 futures must close in backwardation one day, and then close in contango on any subsequent day.

Parameter	Current Range	Recommended Value	Relative to ...
<u>Limit Sell and Cycle End (Upper Limit)</u>	2.32751 - 2.32874	2.3275 (+132.75%) ¹	¹ Initial purchase price
<u>Trailing Stop Sell (does not close cycle)</u>	0.61324 - 0.62315	0.6133 (-38.67%) ²	² Highest closing price since purchase
<u>Cycle End (Lower Limit)</u>	0.48809 - 0.63929	0.5637 (-43.63%) ¹	¹ Initial purchase price

Parameter 1: Limit Sell and Cycle End (Upper Limit). The optimized range is narrow (0.12%). A trigger value at the bottom of the range is recommended to ensure closing a position in case the upper range value eventually turns out to be too high.

Parameter 2: Trailing Stop. Having eliminated the trailing stop trigger, the trailing stop becomes active immediately when the position is opened. The optimized range spans 0.99%. Because a losing cycle must inevitably drop through and below the entire range, the recommended trigger value is at the bottom of the range.

Parameter 3: Cycle End (Lower Limit). The optimized range is wide (15.1%), resulting in some degree of uncertainty. If the trigger value is too low, it could result in a cycle never being properly closed. If the value is set too high, the cycle could be closed prematurely, which could subsequently result in the erroneous opening of a new cycle. For this reason, the recommended trigger value is picked to be in the middle of the range. Keep in mind, however, that the value could be off by as much as 7.5% in either direction.

Results Based on the Modified Parameters

Table 3 shows how the strategy fares when the three reoptimized parameters are applied.

Table 3. Historical and Synthetic Results with Modified Parameters

cycle #	buy date / cycle start	sell date	cycle end	result	cumulative balance (10.00)	max cycle drawdown	months held	Cumulative CAGR since 03/30/04
1	3/30/04	11/10/04	11/10/04	133.49%	23.35	-1.10%	7.39	296.1%
2	4/19/05	3/30/06	3/30/06	133.95%	54.62	-5.60%	11.33	133.9%
3	6/1/06	7/24/07	9/29/08	33.46%	72.90	-23.80%	13.73	55.5%
4	12/11/08	10/22/09	10/22/09	132.87%	169.77	-6.20%	10.35	66.4%
5	11/2/09	4/20/10	4/20/10	138.11%	404.23	-0.50%	5.55	84.2%
6	5/12/10	1/14/11	1/14/11	135.69%	952.7	-31.50%	8.11	95.6%
7	3/16/11	8/5/11	9/22/11	6.07%	1,010.6	0.00%	4.67	85.4%
8	11/16/11	3/26/12	3/26/12	153.51%	2,561.9	-6.50%	4.30	100.2%
9	5/21/12	1/22/13	1/22/13	133.23%	5,975.1	-14.00%	8.08	106.5%
10	2/26/13	7/1/14	7/1/14	137.35%	14,182	-6.50%	16.10	102.9%
11	10/21/14	8/24/15	1/15/16	-9.65%	12,813	-23.73%	10.09	83.4%
12	2/17/16	11/21/16	11/21/16	141.52%	30,947	0.00%	9.13	88.8%

Differences between Table 1 and Table 3 are boldfaced: all are the direct consequence of loosening the trailing stop. The wider trailing stop slightly degrades the outcomes of Cycles 3 and 7 (losing cycles). Cycle 12 is transformed from a losing cycle to a winning cycle.

When Will Cycle 13 Begin, and How Will It Proceed?

Three conditions must be met to trigger the beginning of Cycle 13. When these conditions have been met, a buy signal will be triggered and Cycle 13 will begin.

1. Cycle 12 must have been closed. (This condition was met on November 21, 2016.)
2. The F1/F2 futures must close (settlement price) in backwardation. As of this writing (November 28), this condition has not yet been met.
3. Subsequently, the F1/F2 futures must revert and close (settlement price) in

contango.

The limit sell price and the cycle end (lower limit) values are immediately calculated based on the purchase price. The trailing stop immediately goes into effect, and its value must be updated each day that XIV closes at a new intracycle high.

The position is sold when one of two events occurs. Either 1. XIV closes above the limit sell price. This event also closes a successful cycle. Or 2. XIV closes at or below the trailing stop value. This event does *not* close the cycle. The losing cycle remains open, but without a position, until XIV closes at or below the cycle end (lower limit) value.

Caveats that Must Neither be Ignored nor Overlooked

The parameter ranges and recommend values can never be considered as "final." They may still require adjustment, following the completion of future cycles. This caveat was clearly stated in the original article. Its importance is emphasized by the premature exit of the XIV position in Cycle 12, based on original parameters.

Past performance neither guarantees nor implies future outcomes. This goes without saying. Nevertheless, some readers' past comments suggest that they either did not understand, or ignored the concept.

The model is based on *closing* prices for ETPs, and *settlement* prices for F1 and F2 futures. Intraday prices are *not* relevant to the model, and cannot be used when applying the strategy.

XIV and SVXY are volatile, and are high-risk ETPs. Nobody should invest any more in this strategy than they are willing to lose. Although a 100% loss is improbable, it could occur.

Disclosure: I/we have no positions in any stocks mentioned, and no plans to initiate any positions within the next 72 hours.

Comments (57)

Cyberjoe

Hi David! This is definitely an interesting strategy. However, you should read up on data snooping / curve fitting, as you have only 12 trades over 13 years in combination with 3 parameters. The low number of trades results in little statistical significance of your backtest. Please don't bet your retirement on this strategy!

If I were you, I would reduce the number of parameters and strive for a much higher number of trades (100+).

Best of luck!

29 Nov 2016, 09:38 PM

[Delete Comment](#)

David Easter, Contributor

[Author's reply](#) » [Cyberjoe](#),

While I was a working person, I did put a significant fraction of my investments to this strategy--and as a result I was able to retire early last June.

Fewer than three parameters is not possible in a successful quantitative model. (See discussion of this in the text.) Every quantitative strategy must have a beginning, ending, and trailing stop.

The number of trades in the strategy is conditioned on outcomes, not vice-versa. One does not predetermine the number of trades. One strives for the best outcome, and the number of trades is a direct consequence.

I am well versed in statistical analysis, including the concept of "data snooping" as it relates to curve fitting.

I wonder if you are? Although the strategy is certainly imperfect, it has much greater statistical significance than you assert. Three parameters that are optimized to fit twelve observations may or may not be statistically significant for a given model. You can only be sure that there is zero significance when the number of observations is less than the number of parameters--which is clearly not the case here. On the other hand, when the number of observations is four or more times the number of parameters, the case of "statistical insignificance" can no longer legitimately be made based solely on the ratio of parameters/observations. Such a case can only be based on other legitimate, verifiable factors. If you know of any such factors, please let me know.

The real question here is whether history tends to repeat itself in general terms. Does the price action of XIV tend to move in broad, semi-predictable cycles, or doesn't it? If it does, the basic premises of the model are sound. If it does not, it was just dumb luck that I made enough on the strategy to retire early.

30 Nov 2016, 09:25 AM

[Delete Comment](#)

jz30

"I am well versed in statistical analysis, including the concept of "data snooping" as it relates to curve fitting. I wonder if you are? "

So defensive

15 Dec 2016, 01:19 PM

[Delete Comment](#)**David Easter**, Contributor

Author's reply » Not at all defensive. Simply a statement of fact. If you read the context, the comment was a direct response to the comment, "However, you should read up on data snooping / curve fitting. " The readers comment was rooted in a basic ignorance of the topic that his/her comment is instructing that the author should read up on.

Other readers who share the same basic ignorance will tend to think that the instruction to the author has merit, and will tend to "like" such comments. This serves no purpose for advancing any meaningful discussion. Just the opposite, in fact, because it rewards and encourages negative comments that have no basis in reality or fact.

15 Dec 2016, 04:44 PM

[Delete Comment](#)**The Protagonist**, Contributor

You got an 81% CAGR since 2004? Not theoretical but realised? well done.

15 Dec 2016, 07:09 PM

[Delete Comment](#)**Gatorade2017**

Dear David, thank you sharing the data. However, you mentioned you have only done two real cycles on XIV, and cycle 11 resulted in a loss, while cycle 12 gave a 29% return, are you saying you were able to retire early because of the gains from cycle 12? thanks.

20 Dec 2016, 01:54 PM

[Delete Comment](#)

David Easter, Contributor

woody5023

Not sure I want a cycle 13 to begin anytime soon. I'm short TVIX and long TQQQ. For cycle 13 to begin, we will need a VIX spike back to around 22-25 range. I know it will eventually come, but that's the interesting thing about this strategy...you can spend months out of the market. For traders, that doesn't appear or sound fun. Looking at your updated parameters, it appears that the average timeframe between cycles won't last more than 4 to 5 months.

I will definitely be watching for cycle 13 to start and will jump in with the profits from my TVIX short and see what happens. I bought XIV right after Brexit and turned a nice quick profit...but sold early at \$34. Thanks for keeping us updated on this strategy idea.

30 Nov 2016, 12:32 AM

[Delete Comment](#)

David Easter, Contributor

Author's reply » [Woody](#),

With the exception of DJI, it appears that the other major indexes have already turned over. I'm not making any predictions, but if we see DJI follow suit, the start of Cycle 13 may occur sooner than we think.

I agree that traders who crave constant action will find this strategy boring. My goal is to maximize

results--as opposed to having fun and excitement, Nobody should put their entire nest egg into a strategy like this. Thus, they should still have plenty of capital for frequent trading, and can also use the strategy's funds between cycles for other shorter term trades.

Best of luck,
David

01 Dec 2016, 01:38 PM

[Delete Comment](#)

toombsb

Hi David

I've been back testing a similar strategy in Metastock going back several years and I get results similar to yours. I am currently long XIV. Metastock supports the VIX continuous contracts so I can model using Contango and Backwardation as have you.

There's an interesting White Paper by Tony Cooper, Easy Volatility Investing, in which he points out that "Stock market volatility, unlike returns, is predictable". Predictable in that there will always be volatility and that the VIX always reverts to the mean. Couple that with XIV, which always goes up (except when it doesn't, thus the need for trailing stops) and you have a very repeatable trading plan such as you have devised.

In this case "curve fitting" has merit if you just change the term to "pattern recognition", the Contango entries being the beginning of a very repeatable pattern.

In this particular strategy, it is possible to create more trades but the individual trade quality suffers.

Keep up the great posts.

Bob

30 Nov 2016, 09:25 AM

Delete Comment

David Easter, Contributor

Author's reply » Toombsb, Thanks for contributing these insights!

30 Nov 2016, 09:32 AM

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Gatorade2017

Dear David, a quick thought. While the current optimization maximizes the cumulative return amount, it may be misleading. It may be misleading because the latest adjustment to the trailing stop maximizes the return of the latest cycle, but significantly reduces the return from the two prior cycles. I am trying to say, if you applied the current system, cycle 7 and cycle 12 can easily be swapped in the future and that can significantly change the cumulative return amount. I don't know how to experiment with that sort of thing, but is this something you have considered when you made your adjustments? thanks.

20 Dec 2016, 03:32 PM

Delete Comment

David Easter, Contributor

Author's reply » Gatorade,

Thanks for the suggestions and questions.

First, it is important to understand that the strategy is rooted in the premise that the XIV price action runs in broad cycles. The historical data, based on more than 3100 XIV data points, strongly confirms the premise with a robust measure of confidence. One corollary is that a price drop of XIV is expected between the end of one cycle and the opening of the next cycle. This expectation was realized in ten

of the eleven between-cycle gaps, the lone exception being an XIV price increase between the first cycle close and second cycle open (based on simulated XIV prices).

Given that the number of complete cycles is only twelve, the three parameters are not as precise as one might hope. That said, the statistical confidence would only be improved by 17% if there were an infinite number of cycles in play. Nonetheless, the potential for improvement warrants reevaluation of parameter values following each cycle.

You are right in saying that the parameter adjustments served to maximize overall gains. It is correct that the most recent adjustments improved the outcome of cycle 12, and worked against the previously published outcomes of cycles 3 and 7. But I would not characterize those changes as "significant reductions". Interpretation of "significant" is probably too subjective in this case.

As to swapping cycles 7 and 12, I disagree with the suggestion that it would change the cumulative return following the latest cycle. Cumulative returns are based on the multiplication of single cycle returns--and multiplication is commutative. In other words, 4×2 gives the same answer (8) as 2×4 regardless of the order of multiplication. While it is true that the interchange would affect the cumulative return following cycles 7-11, it will yield the same final value, with or without the interchange. In fact, you could scramble the numerical outcomes of all 12 cycles any way you like, and the

final cumulative outcome will be identical regardless of the order you choose.

To summarize, confidence in the hypothesis that XIV prices run in broad cycles is strong. That said, it is inevitable, because there have only been twelve complete cycles, that the three parameters will have statistical uncertainty. The uncertainty will improve with the conclusion of each additional cycle--which must be followed by parameter adjustments (if warranted) following each cycle's completion.

20 Dec 2016, 04:42 PM

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Gatorade2017

you are absolutely correct, thank you for the clarification.

20 Dec 2016, 05:03 PM

Delete Comment

lpitzalis

Hi David,

I've been following your system, and I have great respect for your statistical prowess and methods. FYI, they far exceed my own.

That said, I have a question for you regarding your choice of a trailing stop to trigger the selling of the position. I have my own, much simpler system for entering and exiting XIV trades. My exit is defined as:

Exit When:

F1-F2 Contango drops below 0%

* OR *

Spot-F1 drops below 1%

I would be happy to explain the logic behind this method....however that would be a distraction to my query: Have you

considered an alternate trigger for the Exit? Perhaps something that looks at contango, or it's ugly cousin backwardation?

Reason I ask: My system triggered an exit on 6/16/16 vs. your exit on 6/24/16. My exit date would have yielded a higher profit for your Cycle 12. Probably anecdotal, but I figured this is a good time to ask, as your system is "idle" right now, so I'm chipping in my two cents to keep the discussion going. :-)

Best Regards, and GLTA!

10 Jan 2017, 02:39 PM

[Delete Comment](#)

David Easter, Contributor

Author's reply » [Ipitzalis](#),

Sorry for the delayed response. I have been completely off the grid this past week.

Yes, I have explored other trailing stop possibilities, but not exhaustively.

Here's my general line of thought. Assuming that the larger cycles are real and repeatable (which I believe to be true), I would assess the limit sell as firm, and the lower cycle end signal as good, but with a measure of uncertainty. Within this framework, I would only consider trailing stops that are consistent with these two parameters. My current trailing stop is a single parameter that is intended to minimize loss in the bad cycles while avoiding exiting the position in any good cycle. My old trigger stop level failed in the latter goal by exiting the position too early (hindsight).

As I see it, a different trailing stop

strategy would require an additional (fourth) parameter that signals possible re-entry within a larger cycle. This could, for all practical purposes, create smaller cycles within the larger cycles. I have not researched this in detail, so I can't say with certainty whether the approach would improve things. However, I would beware of how the changes would possibly make the outcomes of the bad cycles much worse.

Hope this make sense. Good luck, and thanks for your inquiry.

David

13 Jan 2017, 03:00 PM [Delete Comment](#)

Ipitzalis

Thank you David, and welcome back to the grid!

14 Jan 2017, 09:59 AM [Delete Comment](#)

7538091

Cycle 13 to start at close today if vix futures close in contango??

19 Apr 2017, 09:50 AM [Delete Comment](#)

David Easter, Contributor

Author's reply » 19 April 2016

If F2 settles above F1 today (which appears likely), the strategy, as published, would signal a new buy signal. With the VIX dropping below \$14 intraday, however, my gut tells me this might not be a good trade.

For this reason, I am adding a new "rule" for the trigger signal: On a trigger day, the spot VIX must close at or above \$14.50. (This was true for each of the

previous twelve cycles.)

So, if F2/F1 futures revert to contango AND VIX closes at 14.50 or higher today, I will consider it to be a buy signal. If not, I will wait for a better entry point.

Even at or barely above \$14.50, the VIX would still be relatively low. As a result, traders should monitor their positions closely and must be aware that things could turn south rapidly.

19 Apr 2017, 02:01 PM [Delete Comment](#)

Gatorade2017

Dear David:

But you are buying XIV, no? which tracks the inverse of VIX? meaning, the lower the VIX.....oh I see, you wanted VIX to be high to have room to grow (or buy at low), correct? thanks.

19 Apr 2017, 11:45 PM [Delete Comment](#)

The Protagonist, Contributor

I don't get why adding the spot VIX > 14.5 is a beneficial trigger....

Your strategy benefits from the roll yield in F1-F2 futures (via SVXY)...A steep basis between these futures brings your returns higher. This historically is steep when VIX spot is low.

Let's say VIX jumps to 16 today. And you have F2 > F1. You'd buy SVXY.... But how can this lead to a better result?

20 Apr 2017, 05:43 AM [Delete Comment](#)

Gatorade2017

Dear David - maybe this added condition of VIX >\$14.5 is not needed? had you followed through with cycle 13

on April 19, SVXY is up 44% according to your original strategy.

29 Jul 2017, 04:42 PM

Delete Comment

David Easter, Contributor

Author's reply » Gatorade,

In principle you may be correct.

However, my numbers differ from yours.

If you ignored the \$14.5 cutoff, my data show I would have bought on Apr 24 at \$70.835 (split adjusted), with a cumulative gain of 27.4%--not quite as good as the 44% you cite. My data do not show a hypothetical entry on your date of April 19.

David

29 Jul 2017, 07:29 PM

Delete Comment

David Easter, Contributor

Author's reply » SVXY/XIV prices benefit

from BOTH F1/F2 contango AND from drops in the synthetic 30-day volatility.

While the contango factor dominates over longer times, the 30-day volatility should not be ignored, and can eat your lunch whenever volatility rises quickly.

See: [https://seekingalpha.c...](https://seekingalpha.com/instablog/28319343-david-easter/4937326-quantitative-strategy-for-trading-inverse-volatility-cycle-12-update) and [https://seekingalpha.c....](https://seekingalpha.com/instablog/28319343-david-easter/4937326-quantitative-strategy-for-trading-inverse-volatility-cycle-12-update)

20 Apr 2017, 10:04 AM

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Lear9er

Hi David:

I just stumbled upon your strategy.

Thanks for the wealth of information.

Can this strategy be replicated using options ?

10 May 2017, 08:57 AM

Delete Comment

David Easter, Contributor

Author's reply » Lear9er: I don't

believe so. It is intended for trading the ETP directly.

10 May 2017, 10:35 AM

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anonymoussmith

Hey David, thank you very much for this article. How did you find find the vix future prices at the close?

20 Jul 2017, 06:08 PM

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anonymoussmith

Hey David! When I try to plug in the numbers, I find that the future prices jump from being in cotango to backward action back and forth sometimes on a daily basis. And also, my entry dates for the trades are not the same as yours. What data did you use?

20 Jul 2017, 09:53 PM

Delete Comment

David Easter, Contributor

Author's reply » anon,

Use only closing/settlement prices each day.

Originally, I took VIX closing from Yahoo! Finance, (<https://yhoo.it/2vrI0ng>) and F1/F2 settlement prices from <http://bit.ly/SD13XN>. More recently I have also obtained and downloaded historical data from the CBOE web site.

21 Jul 2017, 09:30 AM

Delete Comment

SquallYst

Hi David,

Thanks for your interesting article. I am really intrigued by your detailed analysis. But I had one question when I was seriously considering putting this approach to invest in XIV or SVXY: once you enter into a long position based on VIX contango/backwardation, these

numbers (daily VIX contango/backwardation values) do not matter to you anymore because you stop loss or make a profit solely based on XIV/SVXY prices. But during your (usually long) holding period, another person, who may start to be interested in this kind of strategy, may find multiple entry points which can result in totally different PNLs. So unless we follow your cycles of investments, we may get different investment results even we use the same approach. Hope I make this clear enough.

13 Sep 2017, 10:08 PM

[Delete Comment](#)

David Easter, Contributor

[Author's reply »](#) Squall,

You are correct. In an earlier blog, I argued that my trading cycles are not an artifact of the starting date of my data analysis. I also argue that these instruments trade in quasi-predictable long cycles--although the current Trump market is certainly an exception! If you buy into the long-cycle hypothesis, you will certainly get different results if you enter a trade midway through a long cycle. In that case, you would want to exit the trade on the basis of when the long cycle began, and not on the basis of your mid-entry price.

14 Sep 2017, 12:10 PM

[Delete Comment](#)

David Easter, Contributor

[Author's reply »](#) I WAS WRONG to second guess my own system! I now realize that the ad hoc rule I added 4/19/16 (based on gut feeling alone) was ill-advised. Those who challenged the "14.50 rule" (Gatoraid2017 and The

Protagonist) were correct. Based on the system (without the rule), cycle 13 would have begun 4/24/17. The following data apply to cycle 13, with split adjusted prices.

SVXY XIV event date

70.83 73.26 cycle start 4/24/17
138.21 145.00 high close 1/11/18
164.90 170.56 limit sell 4/24/17
85.44 89.64 current trailing stop 1/11/18

For me, the lesson is that I tend to get in trouble when I make gut-feeling decisions rather than following the plan. Perhaps your gut-feeling decisions are better than mine 😊

I will update when the (original) protocol signals either a limit sell or a trailing stop.

David

18 Jan 2018, 03:37 PM

[Delete Comment](#)

David Easter, Contributor

[Author's reply »](#) [Update 2/5/18](#)

SVXY closed at 71.82, below the trailing stop.

XIV closed at 99.00, above the trailing stop. (Strange performance divergence over the past few days between SVXY and XIV!)

I had a very small SVXY position, which I exited at 71.82

Based on the model, cycle 13 remains open until SVXY closes below 39.93 and XIV closes below 41.30. In after hours trading (4:33 pm CST) SVXY is at 25 and XIV is at 29. If there is no rebound tomorrow and the closing prices remain below the above levels, cycle 13 will close tomorrow at market close.

05 Feb 2018, 05:33 PM

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Lear9er

Hi David:

Can you please explain the below.

"The position is sold when one of two events occurs. Either 1. XIV closes above the limit sell price. This event also closes a successful cycle. Or 2. XIV closes at or below the trailing stop value. This event does not close the cycle. The losing cycle remains open, but without a position, until XIV closes at or below the cycle end (lower limit) value."

I was trying to understand why the cycle is kept open with no positions ?

best ..

06 Feb 2018, 12:34 AM

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David Easter, Contributor

Author's reply » Because (historically) the price continues dropping to the lower level, and starting a new cycle early costs you money in these circumstances.

06 Feb 2018, 09:39 AM

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Lear9er

Thanks David.

it appears that SVXXY survived the mayhem. It might start trading around \$11.

Will you commence the next cycle 14 ?

06 Feb 2018, 10:29 AM

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David Easter, Contributor

Author's reply » The simplified answer is that SVXY must first close below 39.93 (which is almost inevitable if it resumes trading today). On a

subsequent day, F1/F2 futures must revert to and close/settle in contango. That would be signal to open Cycle 14. [For more details, please read original articles.]

Nobody should invest in this (or any other product) without knowing and accepting the risks. Price action yesterday should make this very clear!

06 Feb 2018, 11:03 AM

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Gatorade2017

Dear David, is SVXY still effectively tracking the VIX at this point? or is the current price more of a reflection of the ticker's inability to rebalance itself effectively (difficulty in purchasing future contracts), thanks.

07 Feb 2018, 08:43 AM

[Delete Comment](#)

David Easter, Contributor

Author's reply » SVXY tracks a weighted balance of F1/F2 futures, not the VIX itself. It's too early to know if it has adjusted completely and is on track with its stated objectives. My best guess is that it is close. ProShares lists yesterday's closing NAV at 11.38, compared to market close of 12.24 (7.6% higher). It will take more data/time to draw a clear conclusion.

07 Feb 2018, 10:50 AM

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Gatorade2017

David thank you for your reply. Do you have an opinion on why SVXY was able to survive Monday's market while XIV wasn't? thanks.

07 Feb 2018, 10:56 AM

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David Easter, Contributor

Author's reply » XIV prospectus specifies that an 80% intraday drop in NAV (which happened) would result in termination. SVXY prospectus is more vague about what constitutes a termination event, so ProShares was able to exercise their discretion and keep the fund open.

07 Feb 2018, 11:10 AM

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jz30

Well there goes that, at least you exited the SVXY portion.

08 Feb 2018, 01:17 PM

[Delete Comment](#)

The Protagonist, Contributor

Not only has he exited, he has sold for the 13th time. And therefore it's an obvious conclusion his total return trading in/out SVXY is better than the buy and hold since inception given the 95% dd we just saw.

08 Feb 2018, 01:31 PM

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David Easter, Contributor

Author's reply » jz30: Yep. My timely exit (trailing stop) was triggered, and can be attributed to the so-called "data snooping" that underlies the model's parameters.

08 Feb 2018, 01:38 PM

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Gatorade2017

if a trailing stop price was in the after-market price range on a day like Monday the cycle can turn into a disaster.

08 Feb 2018, 05:50 PM

[Delete Comment](#)

David Easter, Contributor

Author's reply » I don't follow. All model triggers are based on market

closing prices, NOT intraday or after-market prices. Extended-hours triggers violate the model.

08 Feb 2018, 06:04 PM

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Gatorade2017

Dear David, I meant to say, for a gap down like Monday's after-market, where the price went from \$71 to \$11 the next day, if a trailing stop was set at \$50 for example, the cycle would've been a disaster because one wouldn't be able to sell at \$50.

12 Feb 2018, 09:12 AM

[Delete Comment](#)

David Easter, Contributor

Author's reply » [Gatorade](#),

Anything is possible, although your scenario has never historically occurred. (Doesn't mean it can't happen, of course.)

The following scenario HAS occurred, however. Following the Brexit vote, the futures prices went crazy (after market, of course), I don't have the exact numbers, but I believe XIV/SVXY prices would have dropped 70% or even more if they had been trading that night. By market open the next day, futures had stabilized. XIV/SVXY were down the next day, but not by nearly as much as they would have been the previous night.

So, if you could have triggered a stop loss on XIV/SVXY after hours, you would have been stopped out and would have taken a large, unnecessary loss the night of Brexit.

12 Feb 2018, 10:34 AM

[Delete Comment](#)

Gatorade2017

jz30

thanks protagonist, wasn't aware of what exactly were his entries/exits and didn't feel like going through the whole thread.

Congratulations David on a timely exit!

24 Feb 2018, 02:52 PM

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Gatorade2017

Dear David, looks like a contango is set to happen today, would it be prudent to buy in before today's closing? thanks.

23 Feb 2018, 03:41 PM

[Delete Comment](#)

David Easter, Contributor

Author's reply » CYCLE 14 BEGINS (23 Feb 2018)

F1/F2 futures settled in contango today, signaling the start of cycle 14.

Today's SVXY closing (purchase) price: \$13.18.

Initial stop loss: 8.15

Limit sell (upper limit): 30.68

Cycle stop (lower limit): 7.43

For those interested, Cycle 13 resulted in a net gain of 1.4%.

Remember: never risk more in products like SVXY than you can afford to lose!!!

Gatorade: Sorry--didn't see your question until well after market close. With the benefit of 20-20 hindsight, the answer is yes :-)

23 Feb 2018, 05:15 PM

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Gatorade2017

Dear David, I was asking because in part I was guessing your model was based upon an entry on the next day, and also in part because after Friday's sizable gain I was hoping for a little pullback on Monday (at the opening minutes at least) but from the pre-market prices it doesn't seem that way. thanks.

26 Feb 2018, 09:01 AM [Delete Comment](#)

David Easter, Contributor
Author's reply » [Gatorade](#),
It is based on entry the SAME day (Friday in this case).
Because futures settle 15 minutes after Wall Street closes, opening the same day requires an educated guess as to whether F1/F2 will close in contango. You can try a stop order at Friday's closing level, but there are no guarantees. Good Luck!

26 Feb 2018, 09:18 AM [Delete Comment](#)

Gatorade2017
I see thanks for the clarification.

26 Feb 2018, 09:27 AM [Delete Comment](#)

The Protagonist, Contributor
SVXY and UVXY have changed now. Does this effect your model?
<http://bit.ly/2sX8rnH>

27 Feb 2018, 03:53 AM [Delete Comment](#)

David Easter, Contributor
Author's reply » [27 February 2018](#)

Protagonist:

Thank you for posting the link to yesterday's ProShares announcement!

Unfortunately, yes. With the

announced changes in SVXY that go into effect after market close today, all of the model's numerical targets and parameters go out the window.

The conclusion: this trading model is dead (in its present form), effective market close today.

I will do some research into modifications that will support a profitable strategy, but the results will almost certainly not be as good. (If I come up with such a strategy, I will post a new article on SA.)

Good luck, all!

David

27 Feb 2018, 09:35 AM

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