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The Return of Free Data and Possible Volatility Trading Subscription

Posted on [October 23, 2017](#) by [Ilya Kipnis](#) • Posted in [Data Analysis](#), [ETFs](#), [R](#), [Volatility](#) • Tagged [R](#) • [22 Comments](#)

This post will be about pulling free data from AlphaVantage, and gauging interest for a volatility trading subscription service.

So first off, ever since the yahoos at Yahoo decided to turn off their free data, the world of free daily data has been in somewhat of a dark age. Well, thanks to <http://blog.fosstrading.com/2017/10/getsymbols-and-alpha-vantage.html#gpluscomments> (<http://blog.fosstrading.com/2017/10/getsymbols-and-alpha-vantage.html#gpluscomments>) Josh Ulrich, Paul Teetor, and other R/Finance individuals (<http://blog.fosstrading.com/2017/10/getsymbols-and-alpha-vantage.html#gpluscomments>), the latest edition of quantmod (which can be installed from CRAN) now contains a way to get free financial data from AlphaVantage since the year 2000, which is usually enough for most backtests, as that date predates the inception of most ETFs.

Here's how to do it.

First off, you need to go to alphaVantage, register, and <https://www.alphavantage.co/support/#api-key> (<https://www.alphavantage.co/support/#api-key>) get an API key (<https://www.alphavantage.co/support/#api-key>).

Once you do that, downloading data is simple, if not slightly slow. Here's how to do it.

```
1 require(quantmod)
2
3 getSymbols('SPY', src = 'av', adjusted = TRUE, output.size = 'full', api
```

And the results:

```

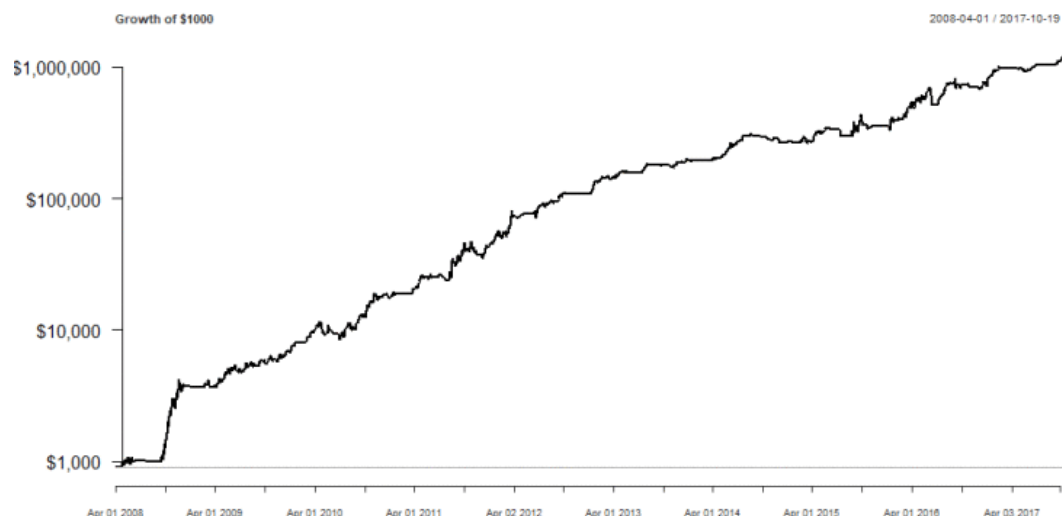
1 > head(SPY)
2      SPY.Open  SPY.High  SPY.Low  SPY.Close  SPY.Volume  SPY.Adjusted
3 2000-01-03   148.25   148.25  143.875   145.4375    8164300    104.3261
4 2000-01-04   143.50   144.10  139.600   139.8000    8089800    100.2822
5 2000-01-05   139.90   141.20  137.300   140.8000    9976700    100.9995
6 2000-01-06   139.60   141.50  137.800   137.8000    6227200     98.8476
7 2000-01-07   140.30   145.80  140.100   145.8000    8066500    104.5862
8 2000-01-10   146.30   146.90  145.000   146.3000    5741700    104.9448

```

Which means if any one of my old posts on asset allocation has been somewhat defunct thanks to bad yahoo data, it will now work again with a slight modification to the data input algorithms.

Beyond demonstrating this routine, one other thing I'd like to do is to gauge interest for a volatility signal subscription service, for a system I have personally started trading a couple of months ago.

Simply, I have seen other websites with subscription services with worse risk/reward than the strategy I currently trade, which switches between XIV, ZIV, and VXX. Currently, the equity curve, in log 10, looks like this:



That is, \$1000 in 2008 would have become approximately \$1,000,000 today, if one was able to trade this strategy since then.

Since 2011 (around the time of inception for XIV), the performance has been:

```

1      Performance
2 Annualized Return      0.8265000
3 Annualized Std Dev     0.3544000
4 Annualized Sharpe (Rf=0%) 2.3319000
5 Worst Drawdown         0.2480087
6 Calmar Ratio           3.3325450

```

Considering that some websites out there charge upwards of \$50 a month for either a single tactical asset rotation strategy (and a lot more for a combination) with inferior risk/return profiles, or a volatility strategy that may have had a massive and historically record-breaking drawdown, I was hoping to gauge a price point for what readers would consider paying for signals from a better strategy than those.

Thanks for reading.

NOTE: I am currently interested in networking and am seeking full-time opportunities related to my skill set. My LinkedIn profile can be found [here \(https://www.linkedin.com/in/ilyakipnis/\)](https://www.linkedin.com/in/ilyakipnis/).

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22 thoughts on “The Return of Free Data and Possible Volatility Trading Subscription”

1.

ian says:

October 23, 2017 at 4:24 pm

Let me know what you decide to charge... if nothing else it would be great to support your work... Many thanks!

Reply

o

Ilya Kipnis says:

October 23, 2017 at 4:26 pm

Thanks. Still would like to get a gauge of interest on a whole.

Reply

2.

Ludo Ludo says:

October 23, 2017 at 6:11 pm

where i can subscribe ? 😊

Reply

o

Ilya Kipnis says:

October 23, 2017 at 7:07 pm

Still considering whether or not to set it up, seeing what the market will bear.

[Reply](#)

Pingback: [The Return of Free Data and Possible Volatility Trading Subscription – Mubashir Qasim](#)

4.

Andrew says:

[October 23, 2017 at 8:56 pm](#)

How much is out of sample? Also, does it hold just one of those assets and rotates between them, or holds them in varying fractions?

[Reply](#)

o

Ilya Kipnis says:

[October 23, 2017 at 9:38 pm](#)

Rotation.

[Reply](#)

Pingback: [The Return of Free Data and Possible Volatility Trading Subscription | A bunch of data](#)

6.

bitfool says:

[October 23, 2017 at 9:23 pm](#)

compare yours with other vol strats at collective2.com. with some digging, you can guestimate how many subscribers the more popular strategies have by looking at their public autotrading records. best guess is that good strats get 20-50 subscribers, best few get 100 or more. no subscribers until you get a good public record though, some months at least, or outperform the competition during a volatile vol spell.

[Reply](#)

7.

Levi Breidenbach says:

[October 23, 2017 at 10:05 pm](#)

I would be interested. Sorry not helpful in the pricing area.

[Reply](#)

8.

an Admirer says:

[October 24, 2017 at 2:03 am](#)

the backtest doesn't include data prior to 2008, just before a sharp drawdown in all VIX strategies if you use reconstructed data (these etfs haven't started trading). you must know that, right?

the curve is highly optimized. I know that because your max drawdown is very low for this strategy. you will do well if the current environment continues. but will have shockingly large drawdowns if the environment changes.

i suggest you allow more losses in your strategy to make it more robust...

[Reply](#)

o

Ilya Kipnis says:

[October 24, 2017 at 3:44 am](#)

Prior to 2008, my signal process didn't exist. And while there may have been some optimization, this was a setting I've actually been following for a couple of years without investing money into it. In short, a more prototypical variant of this system has had some decent out-of-sample performance already.

Reply

9.

joe says:

October 24, 2017 at 7:12 am

Pricing: knowing what I don't know now, my price is less than \$25/month. Before you get any realistic "bids" for the audience who follows you, you need to have a full description of training and testing. I want to know the process you used to develop the system: train, validate, test data groups? What is the trading frequency? how many trades a year?

Try something radical like a sliding scale on how well the strategy performs. I don't mind paying more if I am earning 5%/month

Previous commenter is right: not much data for developing and testing, and it has been an up market for the whole time.

Reply

o

Ilya Kipnis says:

October 24, 2017 at 4:12 pm

Well, I can't really go into detail about how I developed the strategy. The trading signal uses daily resolution data, and has around 50 transactions a year (so about once a week, give or take).

Reply

10.

mikko says:

October 24, 2017 at 10:04 am

I might well give your VXX strategy a go if you make it available, but more valuable would be a strategy that trades some other vol market. EVIX/EXIV, for instance.

Reply

11.

M says:

October 24, 2017 at 3:55 pm

dangerous to invest in a vol strategy that doesn't include 2008 in the backtest

Reply

o

Ilya Kipnis says:

October 24, 2017 at 4:12 pm

2008 was the best year for the backtest.

Close

2008-12-31 2.8300205

2009-12-31 0.7635791

2010-12-31 1.5175673

2011-12-30 1.3492086

2012-12-31 1.4056943
 2013-12-31 0.7780840
 2014-12-31 0.3483828
 2015-12-31 0.3095079
 2016-12-30 0.9311655
 2017-10-23 0.7495239

[Reply](#)

12.

sun says:

October 24, 2017 at 8:36 pm

Looks great. Is that trading EOD or the next morning? If EOD, can we get the “pseudo” signal ~15 min before close so we have enough time to trade? I guess starting with \$25/month as a trial period and once we have really observed it for ~3 month the price can be \geq \$50/month. The C2 strategist usually can provide backtest and live trades time stamps but I guess you do not want to disclose too much. At least we should know if there is any leverage involved and how roughly how much time is in ZIV as the liquidity is kind of low for it. Personally, if it is below \$50/month I will at least give it a try for ~3 month. Thanks.

[Reply](#)

13.

Peter Pitsker says:

October 24, 2017 at 9:20 pm

I would pay for a reliable, tradeable volatility strategy. Do you have a longer backrest or is that the extent of the ETFs?

How many trades a year and what is the winning %?

Thanks – Peter

Sent from my iPhone

>

[Reply](#)

o

Ilya Kipnis says:

October 25, 2017 at 3:07 am

Approximately 50 transactions a year.

[Reply](#)

14.

kzk2000 says:

October 25, 2017 at 2:28 am

I’m interested in your Vol strategy, few questions you could possibly address in next blog post:

1) How often does it trade? 2) What kind of orders to you place (MOO, MOC, intraday)? 3) what’s the average holding duration? 4) what’s the longest draw down period? 5) anything > \$200/ month, I’d prefer something like a waiver of the monthly fee if the strategy doesn’t perform in that month (high water mark approach of some sort). 6) other stats like profit factor, number of trades, max favorable excursion/ max adverse excursion during trade life, trade PnL histogram (if you bought a fix unit each trade)

Cheers, Kilian

[Reply](#)

o

Ilya Kipnis says:

October 25, 2017 at 3:07 am

1/3) Over the course of the backtest, there have been around 50 transactions per year. So we're talking on the order of once a week, give or take.

2) Orders are backtested as MOC with a one day lag (EG it isn't "observe close, transact close" but "observe close, transact next day's close, or anywhere in between as you like").

4) Longest drawdown was 160 days.

The site I have in mind, Patreon, doesn't really alternate on a variable structure. As usual, past performance isn't indicative of future results. Certainly, I don't intend on charging \$200/month, as I can't guarantee a strategy will make a high water mark every month. However, only 13% of quarters have ended in a loss in the backtest.

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