Volume #30 Issue #10

John Bollinger's

CAPITAL GROWTH LETTER

18 March 2017

"Tape Reading and Chart Reading, enable one ... to judge the future course of stocks, by weighing the relation of supply and demand. This sometimes can be done from price movement alone, but if you consider also the volume of transactions you can gain an additional and vitally important helpful factor.

By accurately judging this supply and demand, you are able to decide the trend of the whole market and of certain stocks; also which stocks to buy or sell, and, what is even more important, when to do so." The Richard D. Wyckoff Method of Trading and Investing in Stocks, 1931

Change

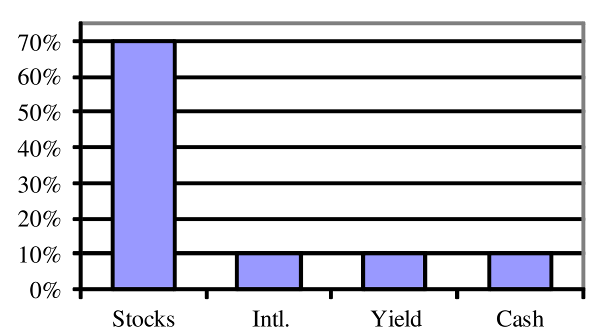
As you must know by now, there have been some changes to our web sites. On the night of February 19th a storm swept through Southern California that triggered a power outage. The outage lasted long enough that it ran through our backup power and shut down our servers. Normally that wouldn't be a problem, but we use RAID arrays, basically a large collection of hard drives acting as a single drive. The advantage of RAID is speed coupled with a high level of redundancy. The problem was that one of the hard drives had crashed earlier in the day so the RAID controller swapped in a hot spare and was in the midst of rebuilding the array when the outage hit. In short, we experienced a perfect IT storm in addition to nature's storm. The result of those storms was the destruction of the section of the RAID array that housed mission critical data and programs. The bottom line is that when I got up the next morning we were out of the Internet analytics business. The data infrastructure for BollingerOnBollingerBands.com, EquityTrader.com, GroupPower.com and PatternPower.com was so damaged, that we decided to move on rather than rebuild it. (Oddly enough, the site I used the least, www.BBForex.com, and the site I love the most, www.MarketTechnician.com, proved to be the easiest to recover.) It was a hard decision, we had been in the business for 20 years, but it was the right one; it was time to move on.

The Internet is not what it was when we started in the mid '90s. Back then it was an exciting frontier. Our revenue was based on a hybrid model, providing much of our content for free while selling some advertising to

The Investing Environment

Monetary	Model	Current
Fed Model	Neutral	
Yield Curve	Positive	1.75
Money Supply	Positive	6.3%
Sentiment	Model	Current
Net Bulls	Negative	35.9
Options	Positive	0.93
Valuation (S&P 500)	Last Signal	Current
Yield		2.00%
P/E Ratio		26.69
Current Trends	Short Term	Long Term
Stocks	Up	Up
Interest Rates	Up	Up
Energy	Down	Flat
Gold	Up	Flat
Commodities	Flat	Up
Dollar	Down	Up

Asset Allocations



support it, and charging for some advanced content. Advertising revenue was more than adequate to support the programmers and infrastructure. It was not a very profitable business, but that was OK as the sites were really built for me and provided the tools I used in my trading and investing. However things changed. Advertisers increasingly demanded our users' private data, a request we refused on principle. Then expenses soared as the likes of Google, Snap, FaceBook and Twitter bid the cost of programmers to the moon. So, faced with an outage that would be very time consuming and costly to recover from, I decided to move on.

However, all is not lost! There are several viable alternatives to the analytics on our websites. There are Bollinger Bands Tool Kits available for a number of platforms and a long-time European partner has built a version of BBands.com. The site first:

Many years ago we started attending ITF, the Italian Trading Forum. There we formed a relationship with Mauro Pratelli's company, TraderLink. As a result, they built a Bollinger Bands website for Italian traders based on our next-gen BB technology, www.BollingerBands.it. Initially it focused on Italian stocks, but later it was expanded to include US and European equities as well. The English version of the site is www.BollingerBands.us and we are in the midst of working with them to extend its capabilities based on initial user feedback. Do give it a try and please be patient. We are working hard to make it a viable alternative to our sites. TraderLink has made a commitment to expand and improve BollingerBands.us; it is already quite a good site and, in time, it should become a BB powerhouse.

Our main thrust going forward is to provide our analytics and tools on independent trading platforms, something we have already been doing for a long time. We started with MetaStock and the most recent tool package we created is with TradeStation. Here is a list of our current partnerships. The individual packages are described below.

Bollinger Band Tool Kits
eSignal
- BB Tool Kit I

MetaStock
- Tool Kit I
- BB System for MetaStock

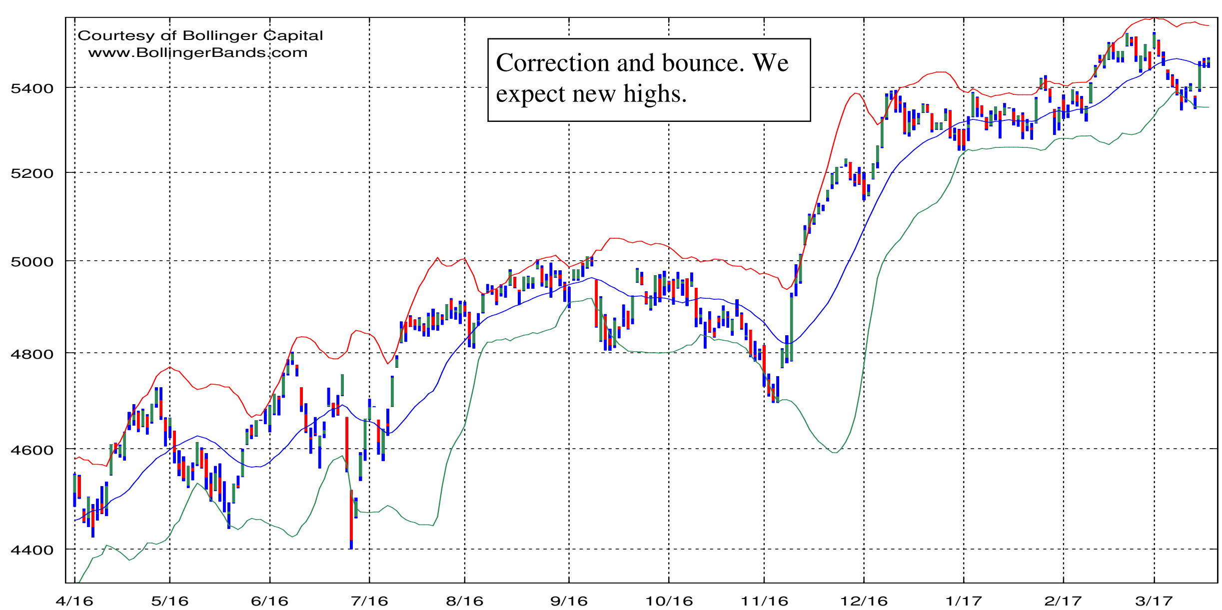
NinjaTrader
- BB Tool Kit II

TradeNavigator
- BB Tool Kit I

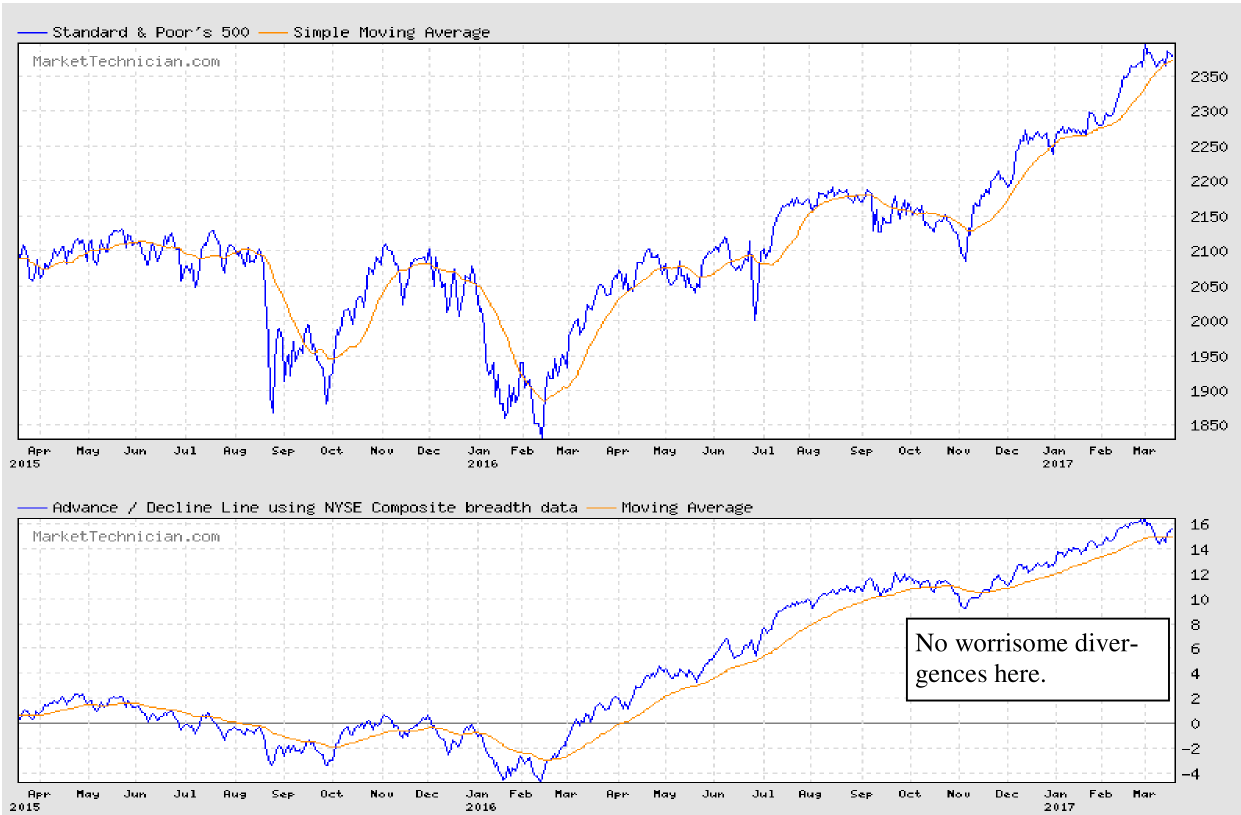
TraderLink
- BBPower

TradeStation
- BB Tool Kit II
- BB Squeeze Package

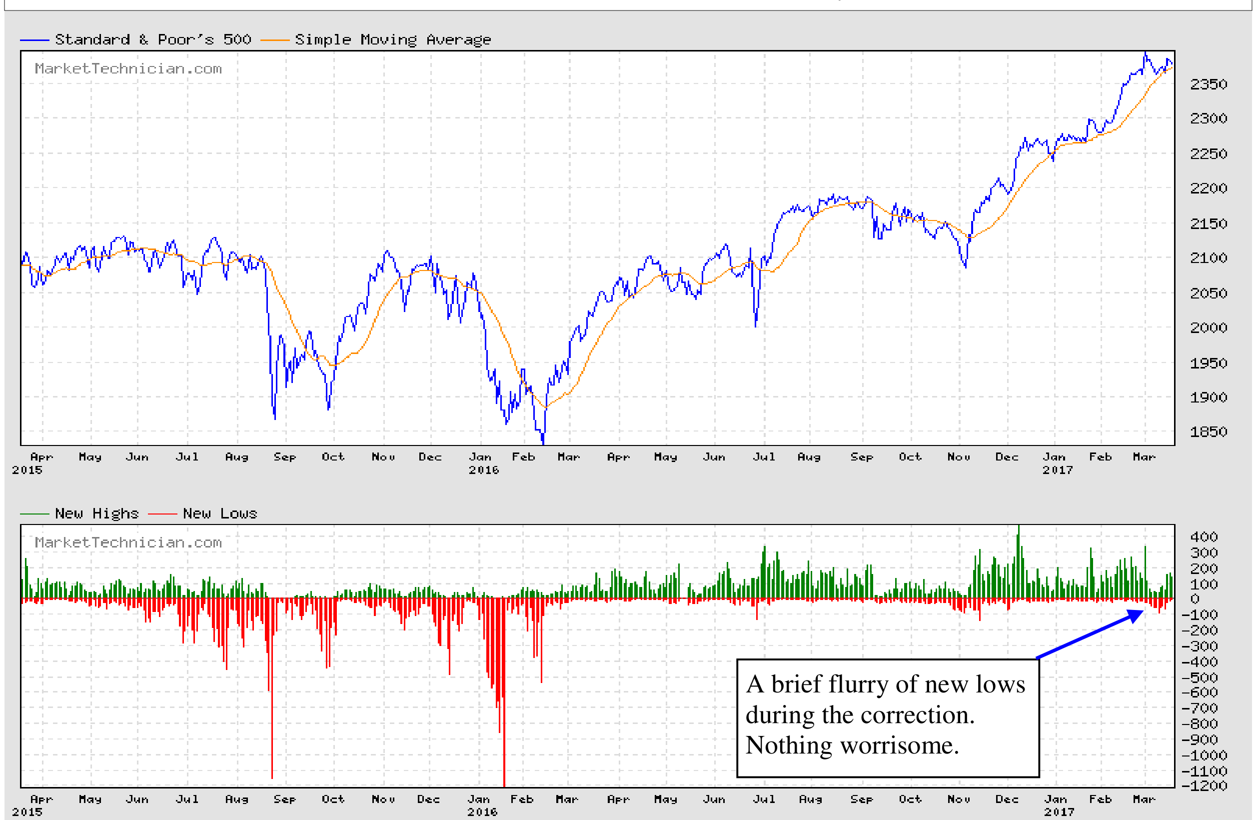
The difference between version I and II of the tool kits is that II includes our latest work. The BB System for MetaStock is a trading system written by John Slauson based on an article I wrote for *Technical Analysis of Stocks and Commodities* that scans large lists of tickers for trading opportunities. BBPower supports the BB



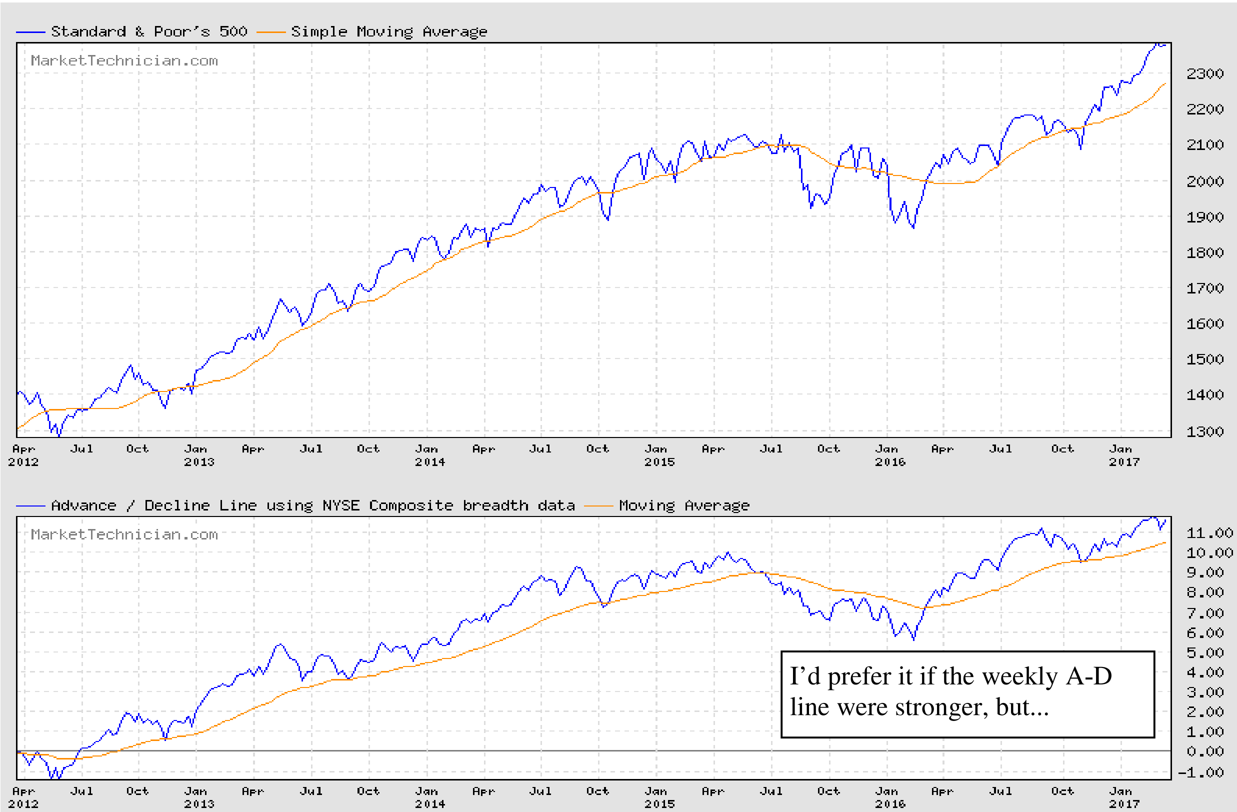
Value Line Arithmetic — One Year



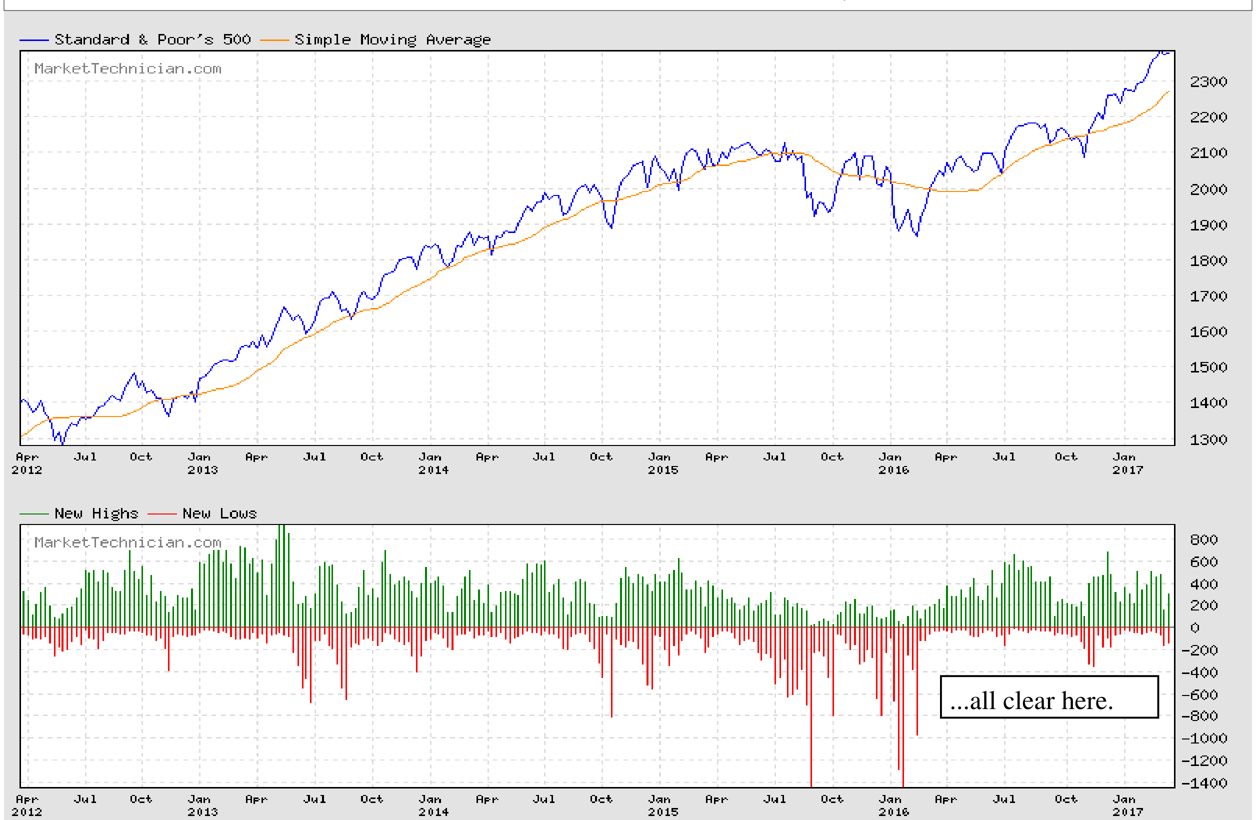
S&P 500 and NYSE Advance - Decline Line — Daily — One Year



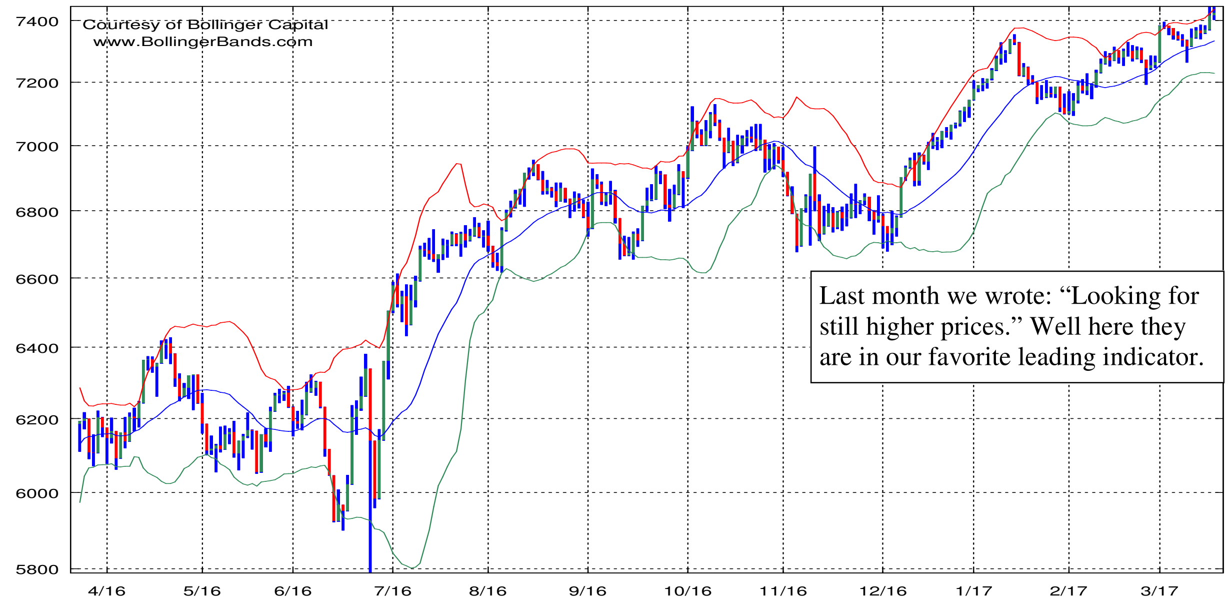
S&P 500 and NYSE New Highs / New Lows Histogram — Daily — One Year



S&P 500 and NYSE Advance - Decline Line — Weekly — Five Years



S&P 500 and NYSE New Highs / New Lows Histogram — Weekly — Five Years



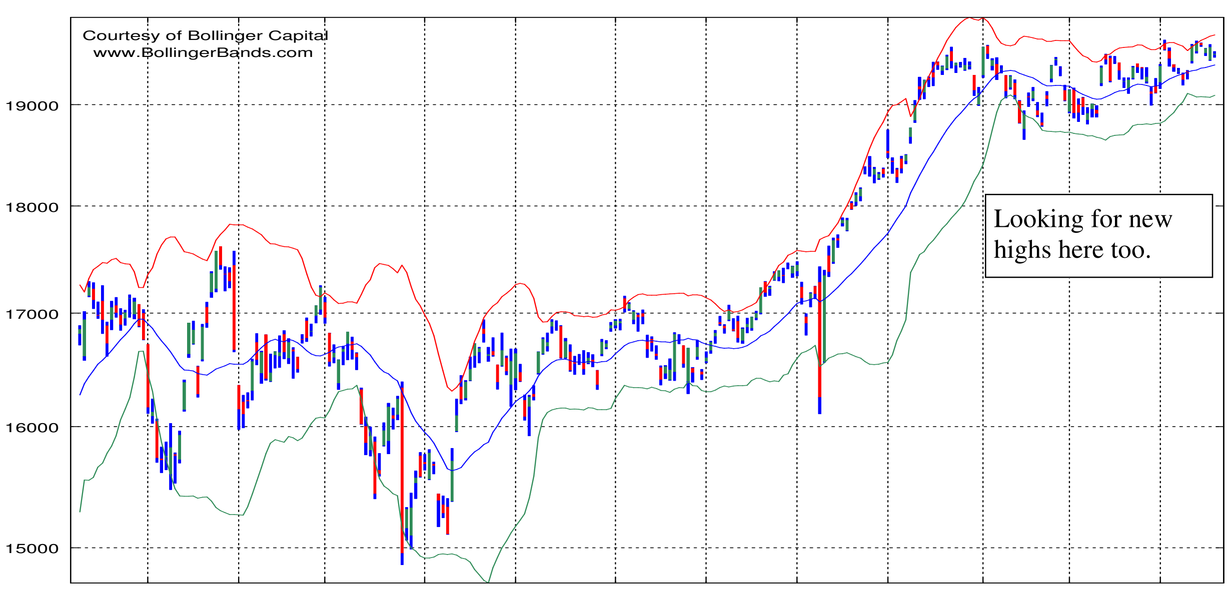
FTSE — Daily — One Year

trading methods and includes a powerful testing capability. The BB Squeeze package is our latest offering. It brings a set of Squeeze trading tools to the TradeStation platform coupled with real-time screening and alerts.

The truth is that I have always made my living in the markets and I will not miss managing an IT operation. The time I devoted to the sites will be much better spent on analysis, trading and investing.

Trend Following

I recently noticed some comments on the Internet regarding a Dow Theory buy signal. The general idea was correct as far as it went, but we had been on a bull market signal for a long time. Since Dow's Theory was the original trend-following system, perhaps a bit of explication is worthwhile. The system is simplicity itself: Consider two dependent and economically-related but non-correlated time series; when they are both up the trend is up, when they are both down the trend is down.



Nikkei 225 — NIK — Daily—One Year

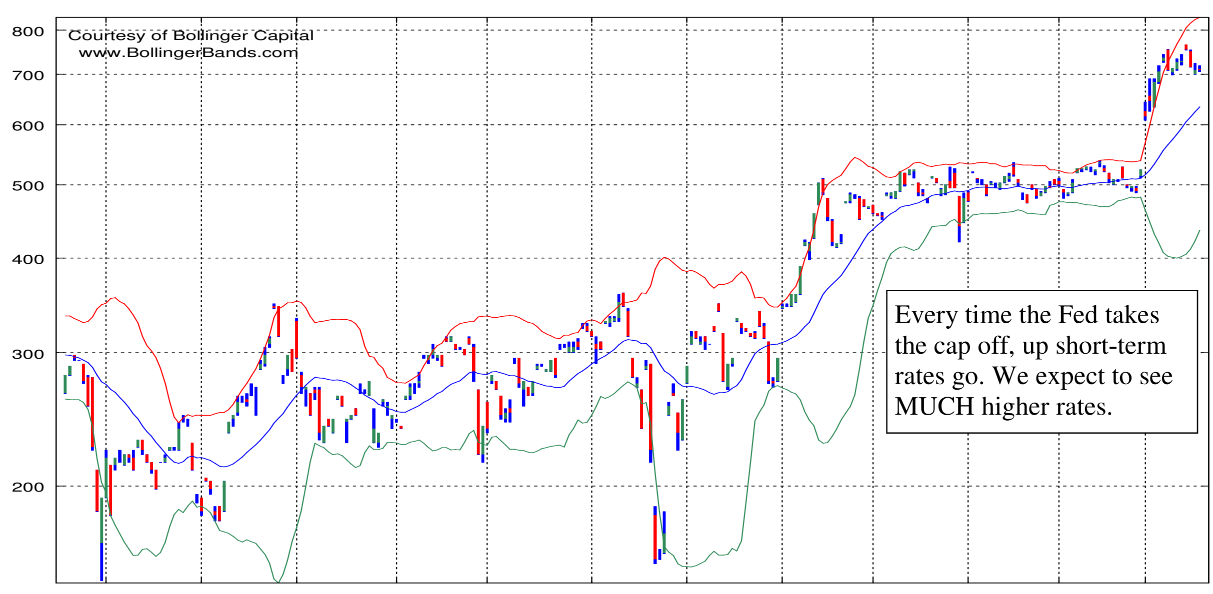
The idea was mooted by Charles Dow after he had time to ponder the first two stock-market averages created for the *Wall Street Journal*, one of industrial companies and one of railroads. Dow's theory was that there was a fundamental relationship between the two that could be used to forecast the economy. It was William Peter Hamilton, the *Barron's* editor, that codified and expanded on Dow's work in a series of editorials that formed the basis of what we now know the theory as, a stock market forecasting device. Robert Rhea pulled it all together in his classic book "The Dow Theory", which was published by *Barron's* in 1932, and was one of the first technical analysis books I purchased. It was Rhea who suggested quantifying the theory by using a percent filter; he liked five percent, a bit on the tight side today. If the current swing rose above the peak of the last swing then the swing was counted as positive. If both swings were positive the theory was positive. There you go, a trend algorithm with roots more than a hundred years old. Many quantitative analysts think that they are continually inventing new ideas; a walk through history will suggest to the open-minded that reinventing is often the case.

I would date the most recent signal to 10 November 2016, when both the Dow Jones Industrial and Transportation Averages recorded new swing highs. The Transport setup occurred on 7 September 2016, though a more conservative interpretation would be 5 October or 7 November. For the Industrials those dates are 8 July and 10 November. (Using swing turns, which is easy with computers, the signals came even earlier, but that is another subject.) In any case, I don't think that there is any ambiguity possible at present, we are in a Dow Theory confirmed bull market. To break the trend I would look to the 9,000 level for the Transports and the 19,700 for the Industrials. Of course those numbers will change as the price structure evolves.

There can be some legitimate debate about the components of this trend-following approach in today's markets. Neither average is what it once was or has the same relationship to each other or the economy and both averages have become political footballs in recent decades. However, it still feels like there is useful information here. What would be really interesting is to devise a modern version. Many have tried; one idea I explored and rejected was to include the Utility Average, creating a three part approach. Others have tried substituting various indices, but I am not aware of anyone who has thought this problem through in an original and interesting manner. The basic concepts as outlined 130 years ago by Charles Dow are clear and there is nothing wrong with them. What is needed is a truly modern take on the components. The question is: What index serves a similar economic role today as did the Industrial Average in its early years, and what is that series' naturally complementary economic foil? Answer those questions and you will have a powerful trend-following system. I have some ideas, but I have never gotten them to gel just right and am still thinking about this. You? Any ideas?

Contrarily Yours

On Friday February 10th I did a CNBC interview with Brian Sullivan in which I rendered a bullish stock-



10-Year Interest Rates

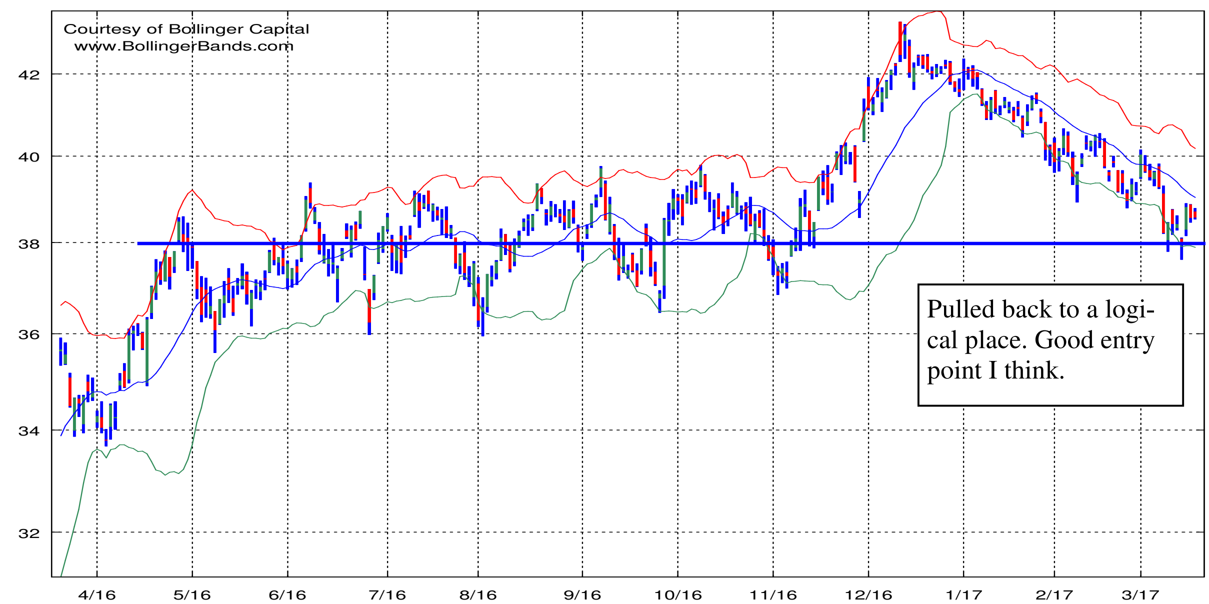
Gold Stock ETF — GDX — One Year

market opinion, discussed the market's expectations about a Trump administration, and commented on the constructive internal condition of the market. Brian asked how the rally could be sustainable with so many already bullish. A fair question that deserves a better answer than I was able to give off the cuff. Not everybody is bullish, even though it may seem so from the perspective of a desk at CNBC. Most potential investors are not involved in the stock market at all, or, if they are involved, it is through a 401k or some similar retirement plan in which they are disinterested at best.

We have been in a consolidation phase for nearly 20 years, during which interest in stocks and investing has declined to a cyclic low. For example, in 2000 many wanted to quit their job and trade for a living; today you never hear anyone even broach the idea. So while CNBC guests may be bullish, the public, in a broad sense, is not. It is not that they are bearish, it is that they don't care.

That contrast is a grand reminder that contrary opinion is truly a thinking man's game, where today's actionable levels are tomorrow's yawners, and those yawners are in

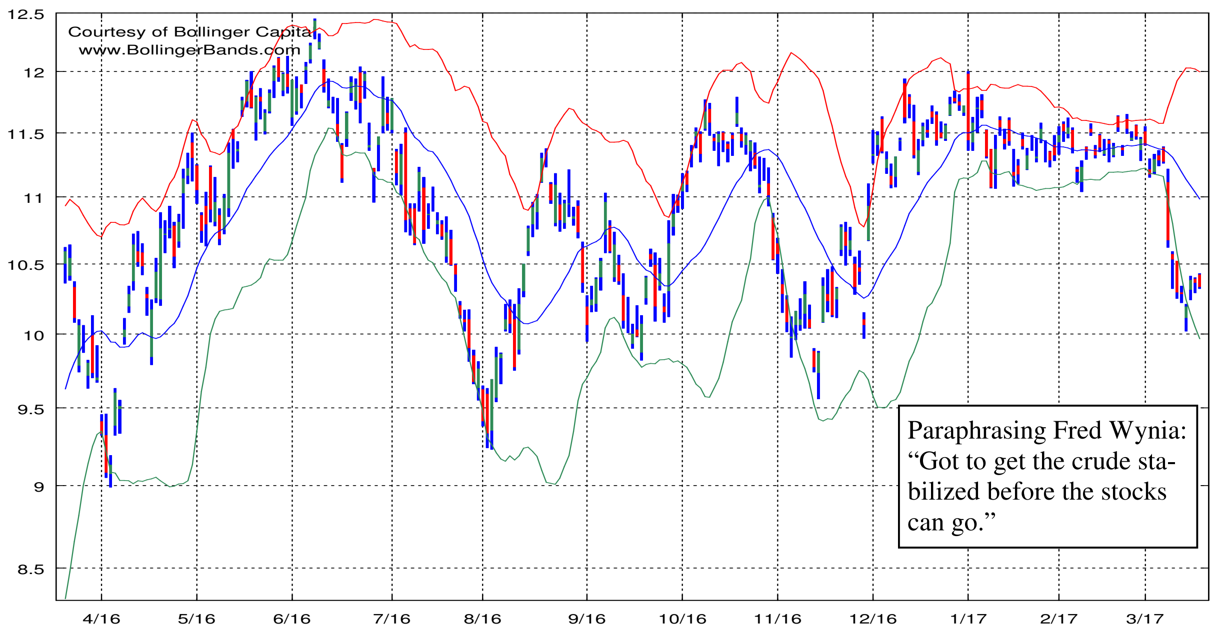
Gold Bullion ETF — GLD — One Year



Energy Stock ETF — IYE — One Year

fact the alert levels for events a couple of iterations down the line. To wit, the Investors Intelligence survey of investment advisors reflects strongly bullish opinion, normally a negative factor, but few potential investors actually care, so high levels of bullishness may not be the negative factor many fear. In addition, in the early stages of a bull market, and we may well be in the early stages of the bull, investors are correctly bullish for a long time.

Speaking of Contrary Opinion, the Trump rally is certainly a case in point. When it was first mooted that Trump might win, the stock market hated the idea and swooned. Then the market caught wind of the idea that a Trump win might mean less regulation, smaller bureaucracies, lower taxes, restraints on imports and a legion of other things the market NEVER thought it would see and the markup phase began. It was a classic setup, right off the pages of Humphrey Neill and Richard D. Wyckoff.



Crude Oil ETF — USO — One Year

The Stock Market

As we have averred was the case for some time, the stock market is indeed well into a corrective phase. We had just come too far, too fast, and a pause to refresh was due. The correction started as a standard rotational correction amongst the sectors and morphed into a small -cap correction and, to a lesser extent, a mid-cap correction. The S&P 500 found support at its middle Bollinger Band, while the mid-cap and small-stock indices and ETFs found support at their lower bands. The Advance Decline line rolled over with price as we would expect and we got a brief fluorescence of new 52-week lows, all well within expectations. In any case we are in a correction to an uptrend, a correction that may well be ending, and some opportunities are being placed in front of us. Small-caps fared worst in the correction and will likely fare well in the recovery, so if you have capital to put to work that seems to be the logical place. Let's have a look at a couple of out-of-favor sectors.

Energy is one sector that is creating opportunities. Natural gas started the ball rolling with a bottom at the end of February. Now that the energy indices, XOI (big oil stocks) and OSX (oil service stocks), have pulled back into logical places and found support some of the stocks are presenting some interesting opportunities.

Next, the precious metals are offering another interesting setup, with the stocks turning up out of base formations. The key here is the stocks are leading the performance of the underlying metals, usually a bullish indication. With inflation ticking up this is the right part of the economic cycle for this trade, so, we shall see, but this is the best outlook for gold stocks in some time.

That's really it for sector opportunities created by the correction; the rest of the sectors are at or near new highs and aren't offering much in the way of bargains, which is to say that the correction hasn't done much damage at all.

(I must say that I really miss our GroupPower service. It really had the best group and sector analytics and I know of no even halfway-decent replacement. I am working on several ideas, but no real traction yet.)

Robustness

Recently I thought that I had stumbled across a new approach to testing for robustness by accident. While working to get the Ice Breaker reports back online the programmer we were using imported the data in reverse order. The effect was that the reports ran from new to old rather than old to new. In essence he ran the trading system backward. The interesting bit is that for QQQ the results were nearly as good as those derived from running the trading system in proper order. For SPY and DIA they were worse. More on this in a bit, but first let's discuss the concept of robustness.

For me the single biggest issue in trading system development is robustness. My basic approach to testing for robustness is to perturb a system and see if the results change by much. For example, if I were checking a simple moving-average crossover system where we are long

Commodity ETF — DBC — One Year

when above the average and short below it, I would increment the length of the average up and down by a small margin and check if the results changed by much; a process I would iterate a couple of times. If the results were relatively stable, I would regard the system as robust. That concept is often called 'insensitivity to small changes in parameters' and is a key measure of robustness.

One can easily find trading systems that were fitted to avoid a disaster by incrementing their key variables. For example, after the crash in 1987 many tuned their approaches to avoid being long in a repeat. If you detuned those systems even a little bit, their results fell apart. That is the opposite of the sort of system that is desirable as a trading vehicle. This sort of thing happens after every large event in the markets, For example, most market timing approaches are now tuned to benefit from the 2007/2009 bear market.

Getting back to using a data reversal as a test for robustness, one cannot reasonably expect a trading system to work in reverse, as psychology does not work in reverse and psychology is what we actually trade. Many people mistakenly believe that we trade fundamental data, like earnings or book value. What we actually trade is how people feel about those things. For example, the healing time after a sudden tragedy is long versus the impulsive quality of the tragedy. An event with a long tail is quite different from a trading perspective than a long, slow build-up to an event. This is why bootstrapping, a very popular quantitative method that involves shuffling existing data to create 'new' data sets (and is a topic for another time) so often produces unrealistic results. Markets are not random processes, they are psychological processes.

Getting back to Ice Breaker, when I created it I tested for robustness and was quite happy with the results. That was long ago and I have seen no reason to change it since. It serves well year in and year out. It does do better in some environments than others—it really likes two-way markets—but it just keeps on ticking.

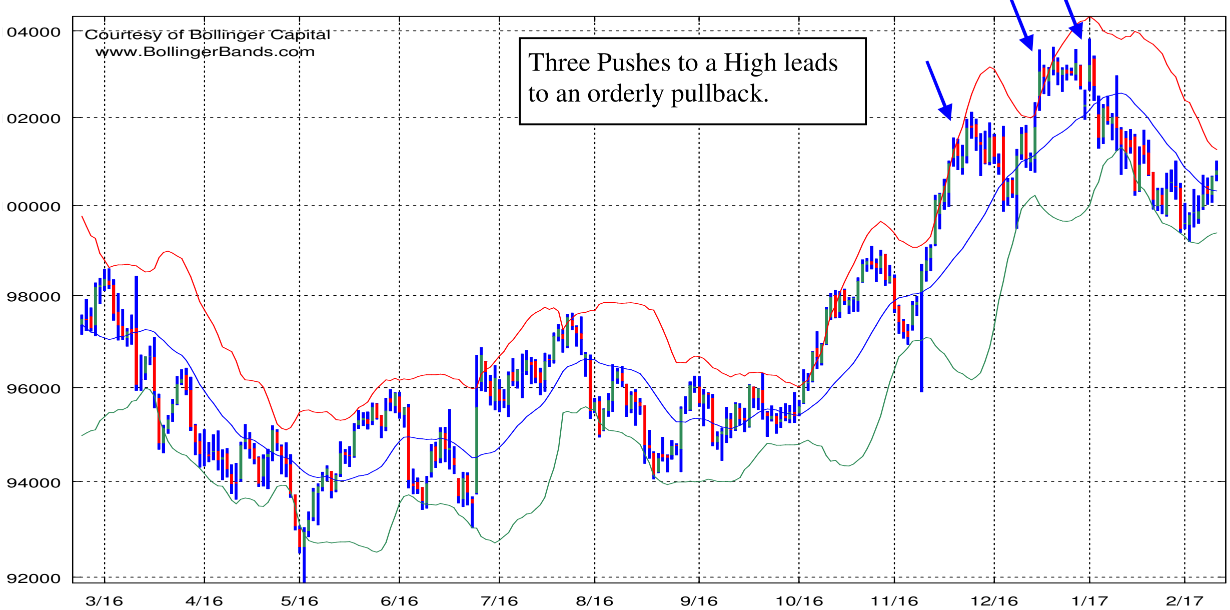
Interest Rates

I strongly believe that we have entered a bull market for interest rates that will carry rates across the maturity spectrum substantially higher. This will be very good news for the yield starved who have been impoverished by years of artificially low interest rates. The other side of that coin is a bear market for bonds. Bonds, especially long-term bonds, are unattractive and will likely remain so for a decade or more.

As you know, I am no fan of Trump, but there is a chance that he will cause substantial change at the Fed. If that happens it will likely mean an end to an activist Fed and a move towards market-driven rates and policy. I think that would be a near optimal outcome as I am completely unconvinced that the Fed has done anything but cause trouble with its activist approach.

View from the Beach

Many people know exactly where they are going. They



US Dollar Up ETF — UUP—One Year

plan ahead and execute. I have always been the opposite, greeting each day to see what it offered. I never really planned anything in my life, I just went along and made the best out of what I encountered. I can't say that one approach is better than the other, but I can say that I prefer one to the other. Oh, I have missed some opportunities, for sure. I could have had a BIG business, but I didn't really want one; family time and quality of life were more important than being a big wheel. I was fortunate to enter the markets at a good time, to be creative enough to fashion my own tools, to stumble upon an opportunity at the Financial News Network and then to say 'no more' and establish my own firm. I have a loving family, have had success in the markets, have been privileged to see a good portion of the world, and in general have lived a good life. I have certainly not maximized my potential, but I have provided for my family and secured our future. The key to my success has been to play each hand as it is dealt, to be present and pay attention. Along those lines many would see our recent technology problem as a disaster, but I see it as an opportunity to focus more on the things I find interesting and less on things I do not care about. More time for the markets, reading and research, less time running an Internet company. Frankly, it seems like a huge win to me.

I am truly sorry for those of you who have come to depend on our sites. As mentioned earlier, we partnered with TraderLink to offer www.BollingerBands.us and we created Bollinger Band Tool Kits for many platforms. For the launch of the Bollinger Band Squeeze package for TradeStation, they are offering a 100% rebate for the Squeeze package or the full BBTK for TradeStation with the opening of a new equity or futures account, see: http://www.tradestation.com/promo/bollingerbands.

Returning to the Internet, what is patently clear is that to be financially successful in the world of the Internet as it exists today means stealing your customers' personal data and reselling it. That is anathema to me; something we have never done and we would never do. I don't understand how we got to such a terrible state of affairs and I am frankly glad to leave that larcenous world behind. Google, Facebook, Twitter, SnapChat, LinkedIn and the rest are simply common criminals, information thieves that exist by selling your data. Without the sale of your personal information none of them would/could exist, never mind be amongst the largest and most powerful companies in the world. In any other endeavor Brin, Kleiner, Ma, Mayer, Weiner, Zuckerberg, and the rest of the merry band of silicone bandits would be behind bars.

If you want a real shock visit this website and remember that this is what Google is admitting they are doing; in fact they are doing much, much more: https://privacy.google.com/your-data.html

Appearances

TradeStation Webinar
March 23, 2017, 4:30 Eastern
https://tradestation.omnovia.com/register/21951488233189

Sector Selector ETF Portfolios

ETF Portfolios	Symbol	Date Selected	Purchase Price	Current Price	Dividends	Return	Rank
Style							(# in 21)
Core Value	IUSV	10/14/2016	45.28	51.23	0.28	13.76%	7
Russell 100 Growth	IWF	2/10/2017	111.06	114.23	0.00	2.86%	2
Russell 1000	IWB	1/27/2017	126.69	132.58	0.00	4.65%	5
International							(# in 24)
Austria	EWO	1/20/2017	17.26	18.31	0.00	6.08%	3
Australia	EWA	2/17/2017	22.23	22.49	0.01	1.19%	11
Taiwan	EWT	2/10/2017	32.41	33.29	0.00	2.72%	5
Sector							(# in 27)
Technology	XLK	3/3/2017	52.51	53.34	0.00	1.58%	1
Global Finance	IXG	12/16/2016	57.96	61.85	0.41	7.42%	4
Semiconductors	SOXX	10/7/2016	113.43	136.34	0.29	20.46%	5

Portfolio

Slot	Name	Symbol	Entry Date	Entry Price	Current Price	Divid.	Total Return	Mental Stop	Action
Core Portfolio - US Equities									
1	S&P 500	SPY	10/19/15	203.20	237.03	5.75	19.5%	224.00	Hold
2	Russell 2000	IWM	11/02/15	118.21	138.46	2.35	19.1%	132.00	Add
3	S&P 500 Value	IVE	03/21/16	90.09	105.71	2.29	19.9%	100.50	Swap out
4	S&P MidCap	MDY	04/18/16	267.64	314.22	3.13	18.6%	300.00	Add
5	Chevron	CVX	08/08/16	101.15	107.68	2.15	8.6%	104.00	Add
6	Oil Services HOLDRS	OIH	08/08/16	28.87	30.58	0.47	7.6%	28.00	Add
7	Finance	XLF	10/08/16	19.75	24.45	0.11	24.3%	22.00	Hold
8	National Oil Well	NOV	12/05/16	38.23	39.31	-	2.8%	33.00	Hold
9	Russell 100 (Equal)	EQAL	12/05/16	26.81	28.28	0.17	6.1%	26.25	Add
10	Healthcare ETF	IYH	01/14/17	147.28	157.95	-	7.2%	147.00	Hold
11	Global Telecomm ETF	IXP	01/14/17	60.09	60.51	-	0.7%	56.50	Hold
12	S&P Small Cap	IJR	03/17/17	69.79	69.79	-	0.0%	65.50	Buy
13	S&P 500 Growth	IVW	03/17/17	132.23	132.23	-	0.0%	124.00	Swap in
Core Portfolio - International									
1	Japan	EWJ	12/14/12	44.99	51.83	1.07	17.6%		Hold/Add
1	World	VEU	10/19/15	45.53	47.98	1.32	8.3%		Hold
Core Portfolio - Yield									
1	Barclays High Yield	JNK	02/20/09	29.17	36.63	20.83	97.0%		Hold
2	iShares High Yield	HYG	02/20/09	69.98	87.08	41.27	83.4%		Hold
3	PS Finan. Preferred	PGF	03/13/09	8.35	18.53	9.67	237.8%		Hold
Core Portfolio - Speculation									
1	VIX Inverse	XIV	10/06/15	27.29	73.58	-	169.7%		Add

Portfolio Notes: The Value Line Plan is in the market with the average at 521.55 and a Friday sell stop of 512.57. There were no changes to the ETF portfolios this week. We are still constructive on the stock market and see no reason to be fielding defense at present. We expect new highs in the averages soon. We are adding a small-cap ETF, IJR and swapping value for growth, sell IVE and buy IVW. Please note that many of our holdings are marked Add.

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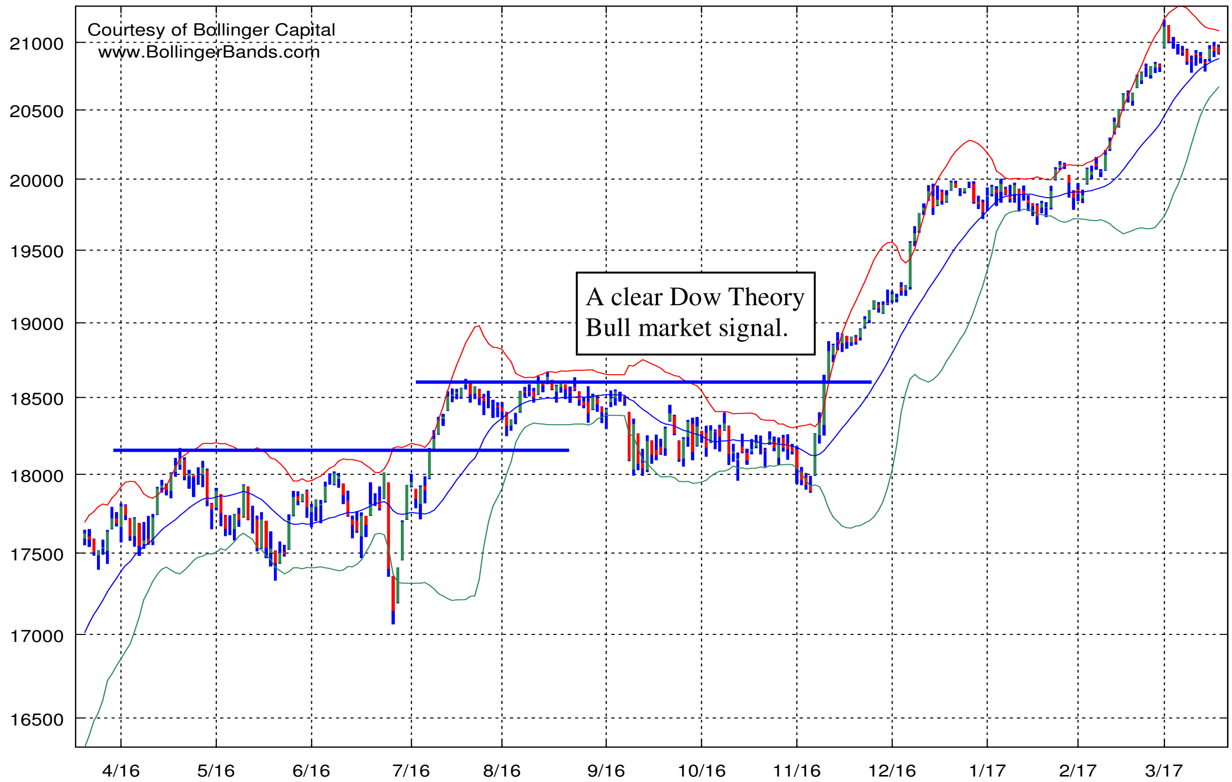
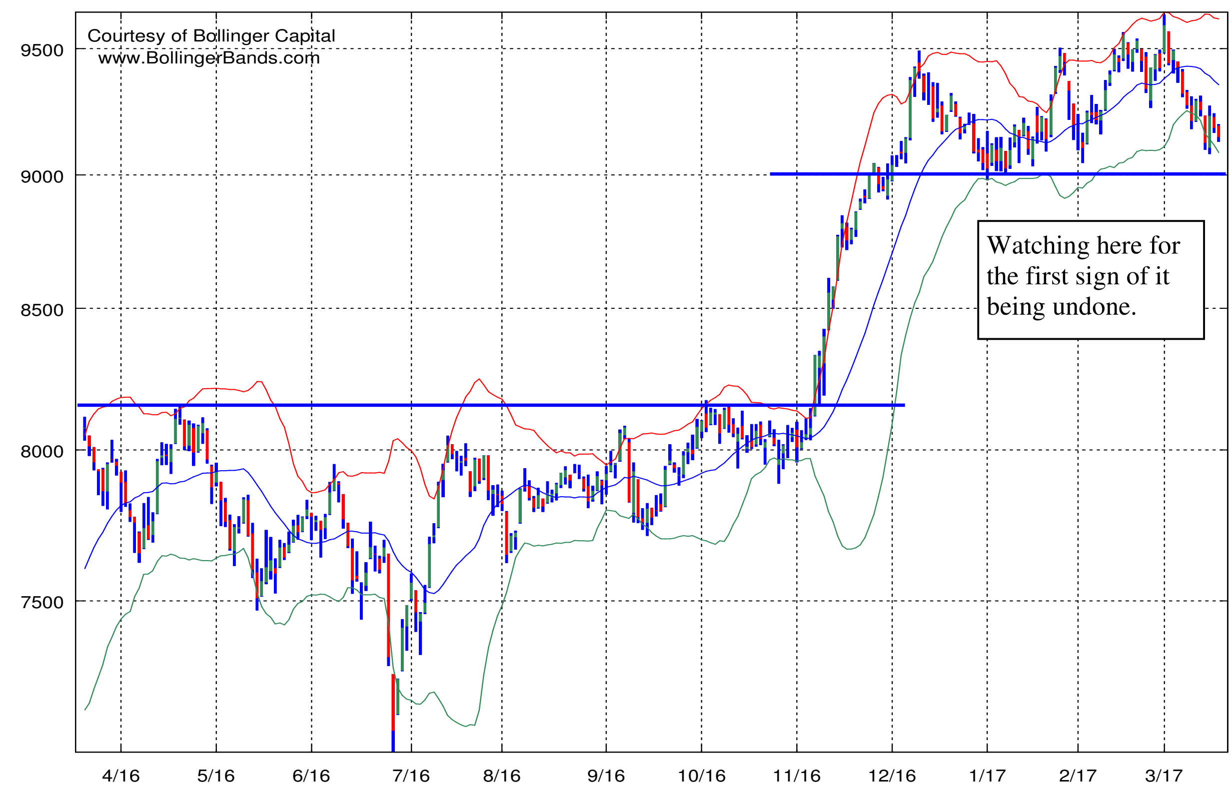


Dow Jones Industrial Average — One Year



Dow Jones Transportation Average — One Year