John Bollinger's

CAPITAL GROWTH LETTER

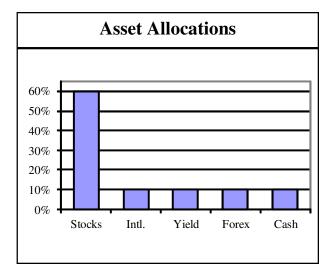
"Stock investors can do no better than simply buying and holding an index fund that owns a portfolio consisting of all the stocks in the market." Burton Malkiel, professor of economics at Princeton University, "A Random Walk Down Wall Street", many editions, first 1970

The Stock Market

With the US stock market struggling to make it into new high territory, the bears are getting a real outing. After pointing at the many 'divergences' and some short-term weakness, they are again making dire predictions. They are almost certainly wrong because in the places where divergences would be really telling, particularly in the broad-market data, there simply aren't any. For example, the NYSE Advance-Decline Line is soaring in new high territory, after what is certainly one of its strongest breakout performances ever. NYSE new 52-week highs and lows are also in fine fettle, with a strong supply of new highs and virtually no new lows. If we were really in trouble we'd expect to see the A-D Line rollover and new lows start to expand. We would also expect deterioration rather than strength in the smaller stocks. However, looking across the spectrum of stocks by size we see that stocks of all sizes are involved in the rally with mid-cap and smaller stocks in leadership roles. All told it is a pretty solid picture. Of course the indices will not all go to new highs together, creating 'divergences' that will be widely noted, but those divergences are not the type that are clarion calls to action. One such divergence that will get a lot of notice is the Dow Jones Transportation Average, which is lagging and not teaming up with its elder brother, the Dow Jones Industrial Average, to issue a Dow Theory buy signal. In this cycle any such signal will come late to this party. Now, if the Transports were headed south and the Industrials north that would be another matter, but that is not the case. Finally, we would be happier if growth stocks were outperforming instead of performing in line. As it stands the US stock market is climbing a wall of worry while we search for evidence that the worry ought to be real and defense ought to be fielded.

Late update: So far the pullback in stocks has held at a logical place, the immediately prior break-out level, a level that bears close monitoring. The most interesting thing about this pullback is the surge in the VIX, which

The Inves	sting Envir	onment
Monetary	Model	Current
Fed Model	Neutral	
Yield Curve	Positive	1.14
Money Supply	Positive	6.7%
Sentiment	Model	Current
Net Bulls	Negative	23.5
Options	Neutral	1.15
Valuation (S&P 500)	Last Signal	Current
Yield		2.17%
P/E Ratio		24.26
Current Trends	Short Term	Long Term
Stocks	Up	Flat to Up
Interest Rates	Down	Down
Energy	Up	Flat to Up
Gold	Up	Up
Commodities	Up	Up
Dollar	Down	Flat



can be seen as a proxy for the cost of insuring a portfolio of stocks. It ran from 12.72 to 17.03, a 34% surge after a mild two-day decline. I have been arguing that fear is the dominant emotion in this market and nothing illustrates that idea better than this surge in the VIX. Chart on page 18.

Energy

For reasons that are hard to understand from an historical perspective, the energy market and the stock market remain closely linked, a relatively rare direct coupling. In the past lower energy prices were mostly considered a good thing. It was thought that cheaper energy meant economic stimulus from low pump prices, lower utility bills, lower input costs to industry, etc. This year lower energy prices were seen as a bad thing, reflective of world economic stagnation or worse. Again we saw fear dominating market thinking. So we find ourselves in the perverse position as investors who are long stocks, cheering higher energy prices. Of course the energy stocks are a large part of the stock market so higher prices for the energy stocks mean higher prices for the averages. However energy is a two-edged sword and we must be careful what we wish for; there will come a time when higher energy prices are seen as a problem, not a benefit.

Gold, Commodities, The Dollar...

Just a few quick takes:

I am wondering if the period of dollar strength isn't

coming to an end. The recovery seems to have stalled multiple times in the 115 area for the Fed's Dollar Index and trading seems sloppy, without any real motive force. The problem with switching to a bear dollar position, which should be our default long-term capital preservation strategy, is that if the markets get a whiff of higher-than-expected US interest rates, the dollar will strengthen.

The gold stocks continue to lead the bullion, so we are not overly worried about the downside for now.

Commodities continue to firm and I like the long-term prospects for this sector and the basic materials stocks.

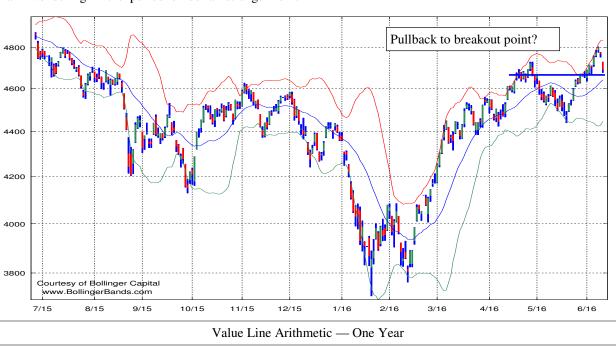
Portfolio note: Long-term accumulations, energy and basic material stocks.

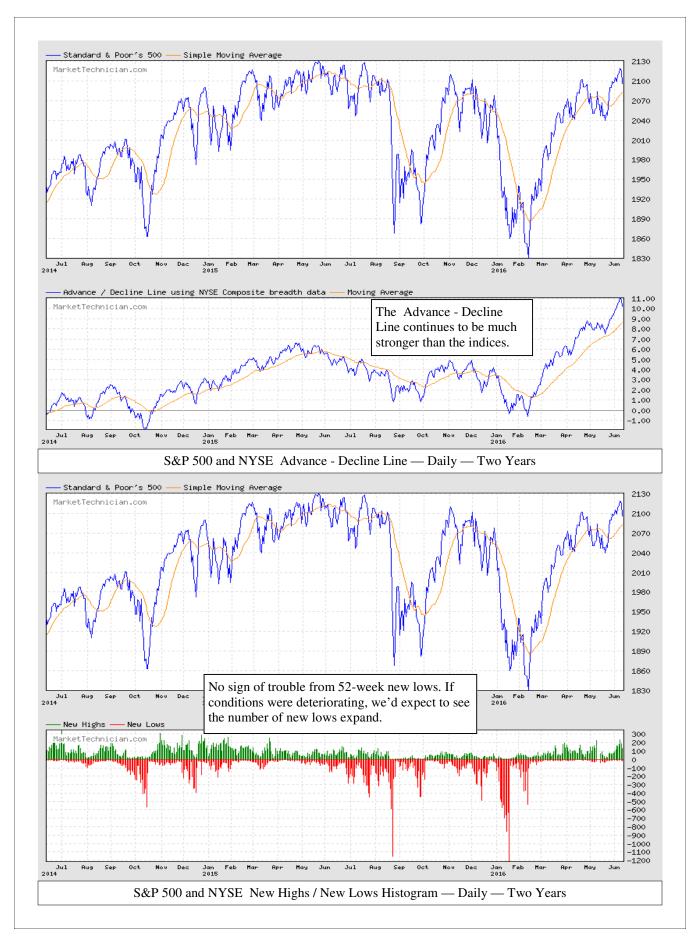
BBTrend

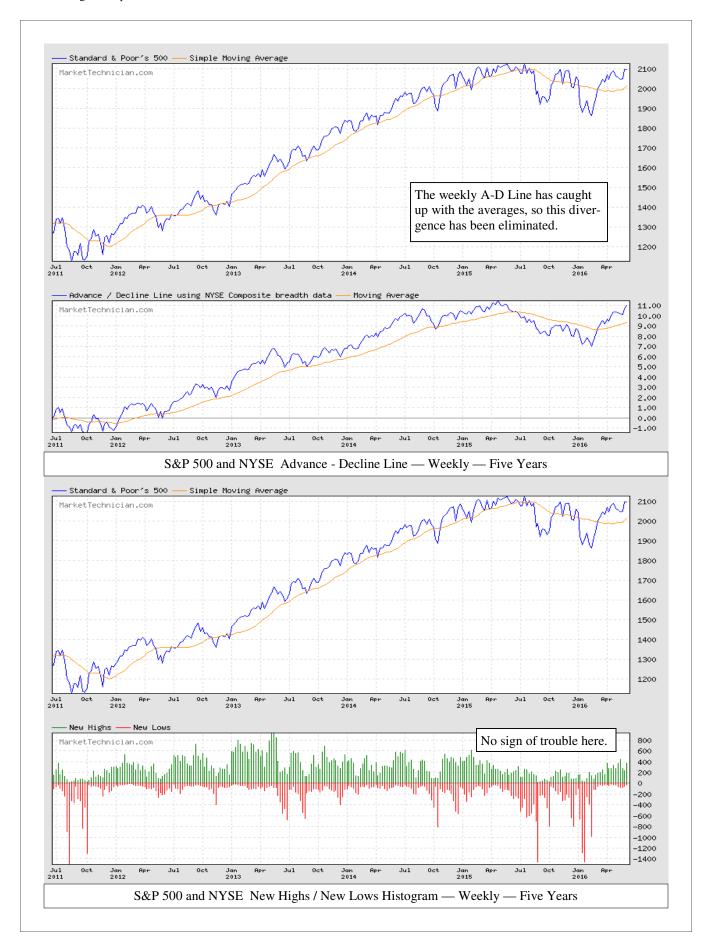
Trading range market: A market in which little or no net price change occurs over time, even though prices may have covered a great deal of ground.

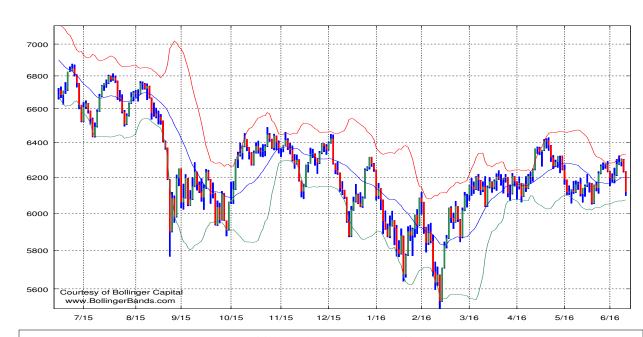
Trending market: A market characterized by persistent positive or negative price change leading to large cumulative changes in price over time.

Trending versus trading range indicator (goes by many names): A technical indicator designed to differentiate between trading range and trending markets. May or may not include directional information as well.







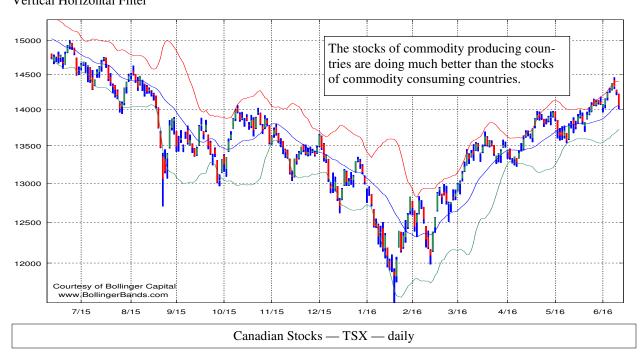


British Stocks — FTSE — Daily

A user of the Bollinger Bands Message Board asks about BBTrend, noting that it is akin to indicators like Welles Wilder's Average Directional Movement, ADX, which is part of Wilder's Directional Movement trading system. We provide five indicators to analyze the trending characteristics of the market on our web sites in addition to BBTrend. They are:

Aroon Choppiness Index Directional Movement (Includes ADX) Vertical Horizontal Filter The Range Indicator

It is beyond the scope of this letter to go into them all; I just note that the six comprise six very different ways of getting at the answer to the age-old trader's question: "Are we trending?" Some also try to address the ancillary questions: "If so, how strongly?" and "In what direction?" As these indicators have very different characteristics, the best approach for the analyst trying to differentiate between them is to pick an application and then select the one that works best for that application.



(Careful study of just these six indicators would provide an excellent course in miniature in technical analysis.)

Several years back it occurred to me that I could create a series of indicators utilizing the Bollinger Band framework that would be logically consistent with one another. I set out to create one in each major technical analysis task category. That work became the basis of the second generation of our Bollinger Band Tool Kits. Of the new BB indicators, the most interesting to me is BBTrend, which is also the most conceptually interesting.

The germ of the idea for BBTrend sprang from the work of the French technician Philippe Cahen who spent a lot of time thinking about how Bollinger Bands behave in rallies and declines and has written about Parallels (sustainable trends) and Bubbles (unsustainable trends). In addition, Philippe, like me, has been fascinated for a long time with using multiple time frames in his work; hourly, daily, weekly and so on. One way I incorporate multiple time frames into my work is by plotting multiple Bollinger Bands on the same chart, usually 20- and 50-period. Many years ago I notice that in an up trend the 20- and 50-period upper bands would almost merge with one another while the lower bands would spread apart dramatically and then run parallel to one another. This behavior was roughly akin to to a multiple time frame version of Philippe's Parallels. Similarly in the down trend the lower bands would run together while the upper bands distanced themselves from one another. The third case is the non-trending market, in which the upper and lower bands run quite close to one another with the gaps fairly constant. It was from those observations that I devised a new indicator, BBTrend, when I went to work on the new BB Tool Kit. BBTrend takes the distances between the lower bands and subtracts the distance between the upper bands. In a strong up trend you get a large positive number and in a strong down trend you get a large negative number. Add a tiny bit of math to cancel the signs, normalize, and Bob's you uncle!

In the beginning I expected BBTrend to work much like ADX with values above x indicating a positive trend and values below y indicating a negative trend, and that does work, but what I have found more interesting is noting the turning points in BBTrend as alerts of critical market junctures.

There you have it, BBTrend in a nutshell; annotated examples on page 17. BBTrend is available on BollingerOnBollingerBands.com, BBForex.com and in our BB Tool Kits for TradeStation and NinjaTrader.

Bonds

A friend is approaching retirement. His wife has already retired and they are transitioning over the next several years to a new home in Hawaii where they plan to live out their golden years. The good news is that between his pension plan from work, both of their Social Security payouts, and some savings, they have enough capital and income to retire in the style they wish to. As you know Bollinger Capital does not provide any financial

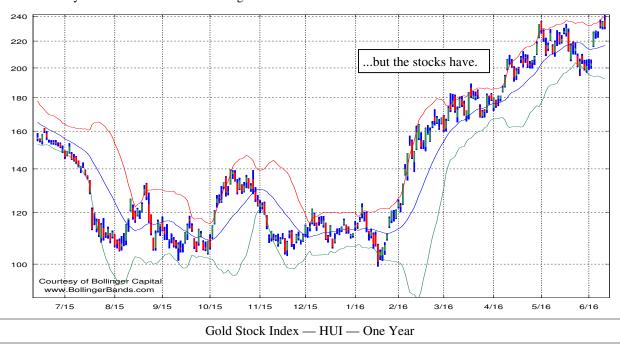




planning services, but he was a friend in need so I agreed to show him how to lay out his retirement in terms of cash flows in an Excel spreadsheet. That way they could change various assumptions such as when to start drawing Social Security, what investment returns will be for several asset categories, what tax rates they are likely to face, and so forth. Once he understood how the parts went together he was off and planning for himself.

I did learn one thing; it seems that the actuaries at the Social Security Administration are on their game and it

really doesn't make much of a difference when you start collecting unless you plan to substantially outlive the average of their actuarial lifespan assumptions. So the main effect of all that propaganda about postponing collecting your benefits until you are 70 is to help the Social Security Administration with its Baby Boomer driven cash flow problem. All of which is to say that it really does help to put all your data into a spreadsheet and work the numbers before deciding when to start collecting. In this case, the conventional wisdom isn't wisdom for all.



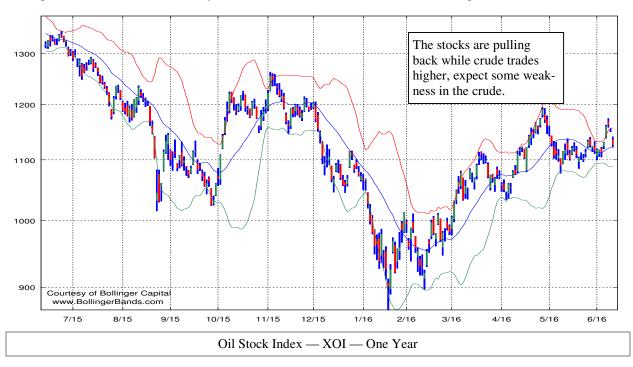


Another place where a certain lacking in the conventional wisdom showed up was in muni bond fund yields, where it seemed that most funds were priced with the very highest tax brackets in mind. My friend was looking to park some money from the sale of their mainland home in muni bond funds, but even given his current good salary and consequent tax bracket taxable bond funds were a better deal for him on an after-tax, total-return basis.

A couple of last related items. They had a 'financial

advisor' (broker) who was recommending very long-term bond funds, generally with durations of greater than nine years and thus terrible risk/reward ratios, with hefty front-end loads and high fee structures. Maybe as the current administration desires, such 'advisors' should be held to fiduciary standards; if they were they sure as heck wouldn't be making those recommendations.

Getting to bonds in general, all but the lowest-duration, shortest-term bonds offer poor risk/reward ratios in this



low interest rate environment. Try this test on your bonds and bond funds. Let's take a major bond fund for an example. Vanguard's Total Bond Market Index Fund is now the largest bond fund in the world, having eclipsed Pimco's Total Return Fund after Bill Gross was forced out, more on which later. Its current yield is 1.97% and its average duration is 5.8. That means that if medium-term interest rates rise by one percent, you can expect the price of the fund to fall by approximately 5.8%, wiping out almost exactly three years worth of yield. Reaching for yield? A more aggressive bond fund like those my friend was offered will sport durations in the mid nines, meaning a one percent rise in long-term rates will drop the value of the fund nearly 10%. Ouch! So what are the odds of a rise in rates? I have provided a 54-year chart of the yield of the 10 year US Treasury bond on page six to answer that question. It seems clear that we are at the bottom of the range and that only a fool would bet their retirement on us staying there. Caveat emptor!

SystemView

In my spare time I have continued working on the trading system visualization project we first discussed two months ago and presented last month. The project is now called SystemView. Rather than looking at the tables of summary statistics that are so popular in the trading world SystemView presents the actual data generated by any given trading approach in a series of visualizations that inform the user about the inner dynamics of the trading system. The idea is that summary statistics can be misleading for a variety of reasons. To quote

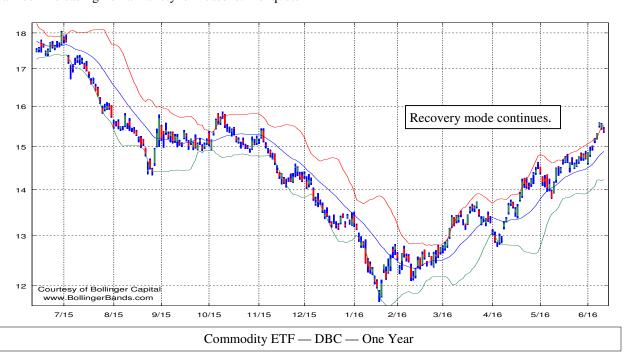
British Prime Minister Benjamin Disraeli: "There are three kinds of lies: lies, damned lies, and statistics." While we don't feel that strongly, when the data is available it is always important to examine it. If it is in fact normally distributed and stable over time then the summary stats are all you need. In our experience that is rarely the case with market data, so having a look at the data is of primary importance.

Last month we presented four visualizations: gains and losses for each trade, a scatter plot of returns versus time in the trade, and two views of the equity curve, linear and logarithmic. This month we add five more: two visualizations of drawdown, our version of John Sweeney's Maximum Adverse Excursion work that depicts the largest pullback within a trade, an efficiency measure, which gives an idea of how much ground was covered in order to earn a return, and finally a volatility plot that depicts the volatility of returns within a trade.

SystemView Charts

- 1. all trades
- 2. trades versus time
- 3. equity curve (linear)
- 4. equity curve (logarithmic)
- 5. drawdowns for each trade
- 6. time spent in draw-down by the system
- 7. Maximum Adverse Excursion
- 8. efficiency (still in development)
- 9. in-trade volatility (still in development)

We haven't lost sight of the original goal of doing visualization for groups of systems to determine robustness;



that will come next. In the meanwhile have a look at the charts on pages 14 through 16. The data is 1950 to date and the system is long only using the direction of the 21-period moving average as a trend-following system. Annotations accompany each chart explaining what it is and why it's important. See last issue for the first four charts in the series.

Computer Corner

- 1. SystemView is written in plain vanilla Python. The only external dependencies are numpy and matplotlib, modules I think could usefully be bundled with Python itself. I use PyScripter as an IDE for this work and find that it suits me well.
- 2. The computing world is changing even faster than I had expected. The powerful desktop PC is actually on its way to becoming a thing of the past. Young people today often do not have a desktop, may never have had one, and an increasing number do not have a notebook or something similar. Phones and tablets, mostly running Android, are increasingly the computing platform of choice. Can't type on those? Get a keyboard. Not enough screen territory? Attach a big monitor or how about a tiny projector? Clearly tomorrow's computing experience will not look like today's and that means big changes for providers of all sorts as users move on.
- 3. I've sort of had it with Silicon Valley arrogance. Most of those big companies like Google, Facebook, LinkedIn, Yahoo!, Instagram, Twitter, SnapChat and so on are simply thieves who would be arrested for theft

and/or fraud and imprisoned if they were individuals. Theft is theft, plain and simple, and they are stealing our personal information and reselling it to the highest bidder. It is completely beyond me why we are enshrining a bunch of common thieves awash in ill-gotten gains. RICO, the Racketeering and Corrupt Organizations Act, investigations seem long overdue.

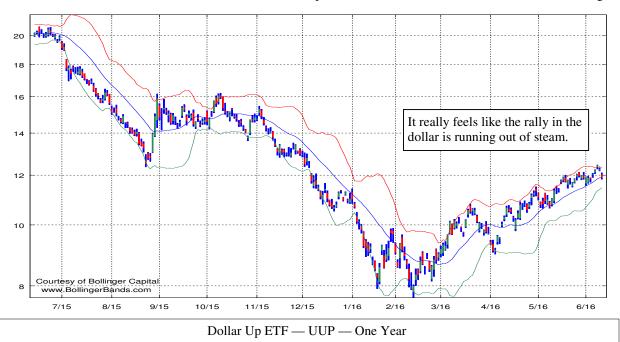
Reading Rack

I am really having a lot of fun reading these two books: "A History of Pi" by Petr Beckmann and "e: The Story of a Number" by Eli Maor. If this was how math was taught we'd have a lot more happy math students and a lot less math fright.

Wiley is out with "Tensile Trading" by Gatis Roze and his son Grayson. I haven't had a chance to crack it yet. I met Gatis some years backs in relation to a TSAA event in San Francisco. He seemed like an interesting guy and accomplished trader, so I am looking forward to reading his book.

View from the Beach

As the quote at the head of this letter so perfectly illustrates, everything you have been taught about 'investing' by the academy and the mutual-fund companies is wrong. Bill Gross, the man who built Pimco, the most powerful bond firm in the world and owner of what was the largest bond fund in the world before he was shown the door, is out with a totally unorthodox piece that tears a hole in the core beliefs in investing as



1.02

GroupPower

Sector Ranks

Statistics

Name	N	I omentur	n	\$\$	Breadth
	Short	Inter.	Long	Flow	10-day Open Arms Index 10-day Open Adv / Dec
Media	6.68	5.55	4.39	36.0	High-Low Index
Basic Materials	0.88	1.66	1.82	51.2	High Low Logic Index
Technology	0.81	1.16	1.06	55.2	8
Yield	0.68	0.90	1.03	86.4	Percent Above Average
Business	0.66	0.92	0.81	55.2	Percent above 10-day mov
Energy	0.52	1.35	1.09	56.8	Percent above 50-day mov
Healthcare	0.32	0.61	0.56	54.4	Percent above 200-day mo
Market ETFs	0.28	0.72	0.74	84.0	reference accordance and mo
Industry	0.26	0.83	1.06	59.2	New Highs and Lows
Consumer Noncyclical	0.24	0.60	0.75	52.8	13-week new highs
S&P 500	0.12	0.42	0.48	N/A	13-week new lows
NASDAQ Comp	0.02	0.33	0.29	N/A	26-week new highs
Telecommunications	-0.12	0.25	0.34	60.0	26-week new lows
Financial	-0.34	0.36	0.38	64.0	52-week new highs
Transportation	-0.36	0.23	0.23	44.8	52-week new lows
Consumer Cyclical	-0.45	-0.47	-0.53	42.4	
International	-0.51	-0.01	0.03	52.0	

10-day Open Adv / Dec	1.36
High-Low Index	96.25
High Low Logic Index	0.49
Dancout About Avenue	
Percent Above Average	
Percent above 10-day moving average	31.53
Percent above 50-day moving average	64.53
Percent above 200-day moving average	71.92
New Highs and Lows	
13-week new highs	1
13-week new lows	2
26-week new highs	0
26-week new lows	0
52-week new highs	3
52-week new lows	1

GroupPower

These tables derived from John Bollinger's Group-Power, a daily analytical service. There are 15 market sectors, 203 industry groups and 5,460 stocks in the GroupPower structure. 2,428 stocks are categorized into industry groups, 3,032 are currently out of groups. The sectors and groups are formed using Rational Analysis, a combination of technical and fundamental tools. In order for a stock to be in a group it must exhibit both a business fit and statistical fit.

www.GroupPower.com

GP is also available from eSignal (800-SMARKET).

A guide to using GroupPower and a listing of the GroupPower structure is available to subscribers.

Short = Short-Term Front-Weighted Momentum, 22day horizon.

Int = Intermediate-Term Front-Weighted Momentum, 62-day horizon.

Long = Long-Term Front-Weighted Momentum, 125day horizon

-5, -10, $-20 = 5{,}10$ and 20 days ago.

\$\$ Flow = Money Flow Persistency. A measure of money flow designed to look out six months.

Early Warnings

Positive Warnings Negative Warnings

Retail Electronics Advertising Marketing Mexico

	Stro	nges	t — (Grou	pPov	ver Ranking —	Wea	kest			
Group		Moment	um	Money	In/Out	Group		Momentu	ım	Money	In/Out
Name	Short	Inter	Long	Flow		Name	Short	Inter	Long	Flow	Gear
Newspapers	47.13	29.60	20.94	14.4	0.16	Banks Midwest	-0.52	0.54	0.64	64.0	0.73
Energy Royalty Trusts	3.79	4.46	3.66	46.4	0.10	ETF International	-0.52	0.06	0.04	69.6	0.73
Gas Producers	3.22	4.47	3.27	29.6	0.78	Wireless Communications	-0.54	0.08	0.36	58.4	0.72
Advertising Marketing	3.21	1.66	0.96	66.4	0.20	Recreation Products	-0.55	-0.92	-1.05	52.0	-0.10
Precious Metals	2.85	3.70	4.95	68.8	0.42	Hong Kong	-0.57	-0.69	-0.68	45.6	-0.15
Steel	2.79	3.18	3.64	57.6	0.70	Retail Apparel	-0.58	-1.73	-1.91	36.8	-0.27
Comps Data Storage	2.72	2.08	0.30	36.0	0.32	Software Health	-0.58	-0.58	-0.49	84.0	0.20
Oil Drilling	2.32	2.88	2.20	60.0	0.68	Diagnostic Products	-0.59	-0.60	-0.69	64.0	0.22
Agricultures	2.17	2.22	1.87	60.8	0.63	Comps Parts	-0.59	-0.76	-0.68	38.4	0.14
Water Companies	2.01	1.98	2.21	97.6	0.70	Trucking	-0.64	-0.39	-0.30	64.8	0.18
Spec Health Service	1.96	2.14	1.84	66.4	0.78	Soft Drinks	-0.71	-0.36	0.12	62.4	-0.35
Retail Discount	1.40	1.37	1.34	80.8	0.64	Lab Research	-0.72	-0.60	-0.49	52.8	0.35
Household Products	1.39	2.08	2.33	88.8	0.43	Automobile Mfg	-0.73	-0.45	-0.68	58.4	0.48
Adv Medical Devices	1.38	1.49	1.22	49.6	0.82	REIT Residential	-0.74	-0.32	0.04	66.4	-0.38
Elec Distributors	1.38	1.39	1.34	60.8	0.55	Russia	-0.80	0.12	0.62	50.4	0.62
Coal	1.37	1.80	-0.94	32.8	0.63	Insurance Life	-0.84	0.38	0.44	60.8	0.60
REIT Health	1.35 1.33	1.46 1.76	1.50	73.6	0.50	Healthcare Providers	-0.86	0.28	0.60 -0.60	56.8 49.6	0.65 0.26
Contract Elec Manu Textiles	1.33	1.76	1.57 0.65	68.8 58.4	0.71 0.83	China Mainland Broadcast TVs	-0.89 -0.94	-0.67 -0.39	-0.00	44.0	0.20
Elec Components	1.23	1.73	1.82	60.0	0.86	Title Surety Insurance	-0.94	-0.63	-0.23	40.8	0.33
Gas Companies	1.19	1.73	2.06	88.0	0.60	Travel	-0.99	-0.03	-0.02	52.8	-0.29
Machinery	1.18	1.98	2.15	60.0	0.88	Banks Major	-1.03	-0.32	-0.36	53.6	0.68
Personal Computers	1.16	1.17	0.74	47.2	0.47	ETF Europe	-1.12	-0.42	-0.32	50.4	0.78
Taiwan	1.10	0.99	0.79	57.6	0.38	Oil Tankers	-1.12	-0.13	-0.58	51.2	0.68
Vehicle Other	1.10	2.07	2.23	61.6	0.62	Asset Management	-1.13	-0.20	-0.23	62.4	0.84
Prescript Benefit Mgt	1.08	2.17	2.21	64.0	0.78	Educational Services	-1.13	-0.19	0.09	27.2	0.10
Health Care Plans	1.07	1.02	0.90	61.6	0.62	Switzerland	-1.17	-0.57	-0.66	63.2	0.70
REIT Office	1.05	1.55	1.79	68.0	0.66	Hospitals	-1.18	-0.64	-0.69	52.0	0.53
Internet Info Prov	1.03	2.05	2.23	67.2	0.58	France	-1.22	-0.83	-1.23	25.6	0.62
Food General	0.99	1.30	1.48	88.0	0.50	Mexico	-1.22	-0.86	-0.38	49.6	-0.13
Software Business	0.94	1.91	1.81	64.8	0.73	Retail Office Supplies	-1.23	-2.66	-2.76	35.2	-0.20
Latin America	0.91	1.20	1.45	57.6	0.64	Biotech	-1.23	-0.43	0.62	12.8	0.57
Medical Supplies	0.91	1.10	1.09	72.0	0.90	Diverse Media	-1.24	-0.88	-0.98	54.4	-0.08
Containers Packaging	0.90	1.33	1.31	68.0	0.84	Retail Broadline	-1.29	-2.55	-2.80	24.0	-0.19
ETF Basic Materials	0.90	1.54	1.84	40.8	0.70	Retail Transport	-1.30	-0.85	-1.24	46.4	0.37
Footwear	0.90 0.89	0.54	-0.01	41.6	0.30	Israel	-1.34 -1.39	-0.19	0.14	36.0	0.82
Comps Services Electric Utilities	0.89	1.38 1.06	1.30 1.30	56.0 99.2	0.81 0.40	Brokers	-1.39 -1.44	-0.18 -0.66	-0.06 -0.59	66.4 68.8	0.78 0.72
Agricultural Machine	0.88	1.05	1.09	70.4	0.40	Germany Oil Refining	-1.44	-0.00	-0.39	57.6	0.72
Food Wholesalers	0.88	0.83	0.82	39.2	0.71	Movies Studios	-1.50	-0.91	0.36	62.4	0.34
Semiconductor	0.84	1.22	1.17	52.8	0.59	Meat and Dairy	-1.55	-1.30	-0.54	68.0	-0.69
Gaming Equipment	0.84	1.70	1.71	58.4	0.74	Mining Diversified	-1.57	-0.55	-0.42	49.6	0.52
eCommerce	0.82	1.13	1.21	64.8	0.90	Solar Energy	-1.66	-2.85	-3.64	21.6	-0.17
REIT Retail	0.81	0.68	0.77	92.8	0.19	Holland	-1.66	-0.86	-0.73	61.6	0.48
Food Retailers	0.79	1.28	0.72	28.0	0.12	Energy Market Dist	-1.66	0.83	1.12	39.2	0.62
Internet Consumers	0.78	1.41	1.10	57.6	0.77	Retail Jewelry	-1.87	-2.63	-2.73	42.4	-0.33
Chemicals Commodity	0.78	1.60	1.70	59.2	0.71	United Kingdom	-1.99	-0.89	-0.81	74.4	0.75
Software Dev Sys	0.77	1.40	1.33	42.4	0.86	Home Furnishings	-2.02	-1.43	-1.32	40.8	0.16
Pipelines	0.76	2.22	2.00	86.4	0.61	Dry Bulk Shippers	-2.48	-1.70	-2.55	21.6	0.40
RĖIT Lodging	0.76	0.36	-0.05	58.4	0.00	Retail Electronics	-2.55	-2.36	-2.58	38.4	-0.15
Semiconductor Equip	0.75	1.51	1.60	64.0	0.78	Spain	-2.79	-1.77	-1.74	44.8	0.32
Home Construction	0.74	0.91	0.64	47.2	0.73						

Sector Selector ETF Portfolios (Experimental)

Exp. ETF Portfolios	Symbol	Date	Purchase	Current	Dividends	Return	Rank
		Selected	Price	Price			
Style							(# in 21)
S&P Mid-Cap Value	IJJ	3/4/2016	119.91	129.06	0.52	8.07%	2
Russell Mid-Cap Valu	IWS	4/11/2016	70.61	73.91	0.00	4.67%	1
S&P Mid-Cap	IJH	4/18/2016	147.36	150.05	0.00	1.83%	4
International							(# in 24)
Belguim	EWK	5/27/2016	18.31	18.24	0.00	-0.38%	1
Russia	RSX	4/8/2016	16.85	17.18	0.00	1.96%	5
Canada	EWC	5/16/2016	24.53	25.05	0.00	2.14%	2
Sector							(# in 27)
Consumer Goods	IYK	2/26/2016	106.32	114.29	0.65	8.11%	4
Basic Materials	XLB	4/25/2016	47.27	47.74	0.27	1.57%	6
Global Telecomm	IXP	2/8/2016	59.22	62.09	0.00	4.86%	14

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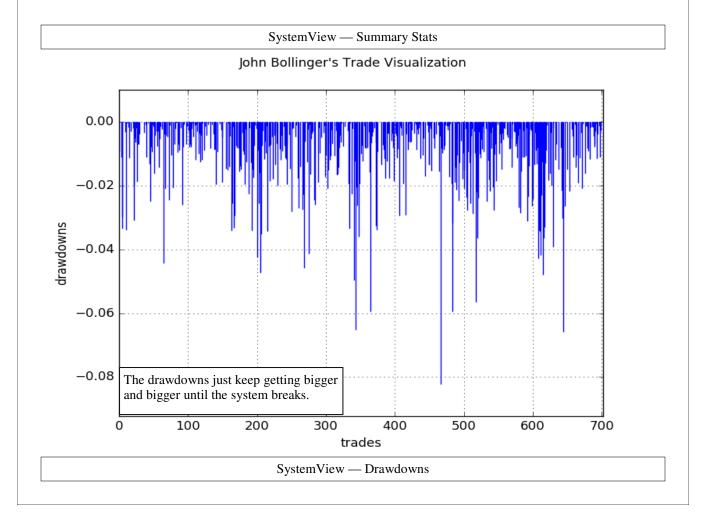
Core Portfolio - US Equities Stock Group Date Price Price Core Portfolio - US Equities SPY 2 Large Cap 2 10719715 203.20 2.06.77 2.26 1 S&P 500 IWM 2 Large Cap 1 11/02/15 98.76 10.075 0.82 3 Russell 2000 IWM 3 Large Cap 1 11/10/215 98.76 100.75 0.82 4 S&P 500 Value IWF 2 Large Cap 1 03/21/16 90.09 92.85 0.55 5 British Petroleum BP 3 Oil Major 2 03/21/16 90.09 92.85 0.55 6 Royal Dutch RDS-A 2 Oil Major 2 03/21/16 48.91 51.31 7 S&P MidCap MDY 2 MidCap 1 104/18/16 48.91 51.31 1 Japan SEP MidCap NED 2 <td< th=""><th>Slot</th><th>Name</th><th>Symbol</th><th>ET Rating</th><th>Symbol ET Rating GroupPower Group ET Rating</th><th>ET Rating</th><th>Entry</th><th>Entry</th><th>Current</th><th>Divid.</th><th>Total</th><th>Mental</th><th>Action</th></td<>	Slot	Name	Symbol	ET Rating	Symbol ET Rating GroupPower Group ET Rating	ET Rating	Entry	Entry	Current	Divid.	Total	Mental	Action
SPY 2 Large Cap 2 10/19/15 203.20 210.07 IWM 2 Small Cap 1 11/02/15 118.21 116.07 IWF 3 Large Cap 1 11/12/15 98.76 100.75 IWE 2 Large Cap 1 03/21/16 90.09 92.85 BP 3 Oil Major 2 03/21/16 48.91 51.31 MDS-A 2 MidCap 1 04/18/16 267.64 273.38 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 Japan 3 12/14/12 9.45 11.65 VEU 2 Japan 3 10/19/15 45.53 43.23 JNK 2 High Yield 2 06/18/15 24.68 24.50 JNK 2 High Yield 2 <t< th=""><th></th><th></th><th></th><th>Stock</th><th></th><th>Group</th><th>Date</th><th>Price</th><th>Price</th><th></th><th>Return</th><th>Stop</th><th></th></t<>				Stock		Group	Date	Price	Price		Return	Stop	
SPY 2 Large Cap 2 10/19/15 203.20 210.07 IWM 2 Small Cap 1 11/102/15 118.21 116.07 IWF 3 Large Cap 1 11/112/15 98.76 100.75 IWE 2 Large Cap 1 03/21/16 90.09 92.85 BP 3 Oil Major 2 03/21/16 48.91 51.31 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 Japan 3 12/14/12 9.45 11.65 VEU 2 Japan 3 12/14/12 9.45 11.65 VEU 3 Bull Yield 2 06/18/15 24.68 24.50 JNK 2 High Yield 2 02/20/09 69.98 83.83 3 PGF 2 Yield 2<	Core	Portfolio - US Equities	,										
IWM 2 Small Cap 1 11/02/15 118.21 116.07 IWF 3 Large Cap 1 11/12/15 98.76 100.75 IWE 2 Large Cap 1 03/21/16 90.09 92.85 BP 3 Oil Major 2 03/21/16 48.91 51.31 RDS-A 2 Oil Major 2 03/21/16 48.91 51.31 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 MidCap 1 04/18/16 267.64 273.38 VEU 2 Japan 3 12/14/12 9.45 11.65 VEU 2 Intermational ETF 2 10/19/15 45.53 43.23 UUP 3 Bull Yield 2 06/18/15 24.68 24.50 INK 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2	-	S&P 500	SPY	2	Large Cap	2	10/19/15	203.20	210.07	2.26	4.5%	202.00	Hold
IWF 3 Large Cap 1 11/12/15 98.76 100.75 IVE 2 Large Cap 1 03/21/16 90.09 92.85 BP 3 Oil Major 2 03/21/16 48.91 51.31 RDS-A 2 Oil Major 2 03/21/16 48.91 51.31 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 International ETF 2 10/19/15 45.53 43.23 VEU 3 Bull Yield 2 06/18/15 24.68 24.50 INK 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Vield 2 03/13/09 8.35 19.00 XIV 3 4 4 4 4 4 4 Bull Yield 2 03/13/09 8.35 </td <td>7</td> <td>Russell 2000</td> <td>IWM</td> <td>2</td> <td>Small Cap</td> <td>1</td> <td>11/02/15</td> <td>118.21</td> <td>116.07</td> <td>0.82</td> <td>-1.1%</td> <td>107.00</td> <td>Hold</td>	7	Russell 2000	IWM	2	Small Cap	1	11/02/15	118.21	116.07	0.82	-1.1%	107.00	Hold
IVE 2 Large Cap 1 03/21/16 90.09 92.85 BP 3 Oil Major 2 03/21/16 31.43 32.22 RDS-A 2 Oil Major 2 03/21/16 48.91 51.31 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 EWJ 2 International ETF 2 10/19/15 45.53 43.23 VEU 3 Bull Yield 2 06/18/15 24.68 24.50 UUP 3 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2 03/13/09 8.35 19.00 XIV 3 4 2 27.29 29.59	ε	Russell 1000 Growth	IWF	3	Large Cap	1	11/12/15	98.76	100.75	0.75	2.8%	96.50	Hold
BP 3 Oil Major 2 03/21/16 31.43 32.22 RDS-A 2 Oil Major 2 03/21/16 48.91 51.31 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 International ETF 2 10/19/15 45.53 43.23 VEU 3 Bull Yield 2 06/18/15 24.68 24.50 UUP 3 High Yield 2 06/18/15 24.68 24.50 PGF 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2 03/13/09 8.35 19.00 XIV 3 4 2 27.29 29.59	4	S&P 500 Value	IVE	2	Large Cap	1	03/21/16	60.06	92.85	0.55	3.7%	89.00	Hold
RDS-A 2 Oil Major 2 03/21/16 48.91 51.31 MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 International ETF 2 10/19/15 45.53 43.23 VEU 2 International ETF 2 10/19/15 45.53 43.23 UUP 3 Bull Yield 2 06/18/15 24.68 24.50 JNK 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2 03/13/09 8.35 19.00 XIV 3 Kield 2 27.29 29.59	S	British Petroleum	BP	3	Oil Major	2	03/21/16	31.43	32.22	09.0	4.4%	30.50	Hold
MDY 2 MidCap 1 04/18/16 267.64 273.38 EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 International ETF 2 10/19/15 45.53 43.23 Ification 3 Bull Yield 2 06/18/15 24.68 24.50 UUP 3 High Yield 2 02/20/09 69.98 83.83 HYG 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2 03/13/09 8.35 19.00 XIV 3 10/06/15 27.29 29.59 29.59	9	Royal Dutch	RDS-A	2	Oil Major	2	03/21/16	48.91	51.31	1	4.9%	47.00	Hold
EWJ 2 Japan 3 12/14/12 9.45 11.65 VEU 2 International ETF 2 10/19/15 45.53 43.23 ification 3 Bull Yield 2 06/18/15 24.68 24.50 INK 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2 03/13/09 8.35 19.00 XIV 3 10/06/15 27.29 29.59	7		MDY	2	MidCap	1	04/18/16	267.64	273.38	1	2.1%	257.00	Hold
2 Japan 3 12/14/12 9.45 11.65 2 International ETF 2 10/19/15 45.53 43.23 3 Bull Yield 2 06/18/15 24.68 24.50 2 High Yield 2 02/20/09 69.98 83.83 2 Yield 2 03/13/09 83.55 19.00 2 Yield 2 03/13/09 8.35 19.00	Core	Portfolio - Internations	al .										
2 International ETF 2 10/19/15 45.53 43.23 3 Bull Yield 2 06/18/15 24.68 24.50 2 High Yield 2 02/20/09 69.98 83.83 2 Yield 2 03/13/09 8.35 19.00 2 International ETF 2 10/19/15 45.53 43.28 2 High Yield 2 02/20/09 69.98 83.83 2 Yield 2 03/13/09 8.35 19.00	-	Japan	EWJ	2	Japan	3	12/14/12	9.45	11.65	0.39	27.5%		Hold
3 Bull Yield 2 06/18/15 24.68 24.50 2 High Yield 2 02/20/09 29.17 35.28 2 High Yield 2 02/20/09 69.98 83.83 2 Yield 2 03/13/09 8.35 19.00 10/06/15 27.29 29.59	-	World	VEU	2	International ETF	2	10/19/15	45.53	43.23	0.34	-4.3%		Hold
3 Bull Yield 2 06/18/15 24.68 24.50 2 High Yield 2 02/20/09 29.17 35.28 2 High Yield 2 02/20/09 69.98 83.83 2 Yield 2 03/13/09 8.35 19.00													
UUP 3 Bull Yield 2 06/18/15 24.68 24.50	Core	Portfolio - Dollar Dive	rsification	ı									
JNK 2 High Yield 2 02/20/09 29.17 35.28	-	Dollar Up ETF	UUP	3	Bull Yield	2	06/18/15	24.68	24.50	1	-0.7%		Hold
Id JNK 2 High Yield 2 02/20/09 29.17 35.28 1 HYG 2 High Yield 2 02/20/09 69.98 83.83 1 PGF 2 Yield 2 03/13/09 8.35 19.00 ion XIV 10/06/15 27.29 29.59	ζ	T. 78 1.1											
HYG) S	Portiono - riela	TIVE	c	11: 1. 37:11		00/00/00	5	00.30	10 10	10L 20		11.11
HYG 2 High Yield 2 02/20/09 69.98 83.83 PGF 2 Yield 2 03/13/09 8.35 19.00 ion XIV 10/06/15 27.29 29.59	-	Barclays High Yield	JNK	7	High Yield	7	07/77/09	73.17	32.28	19.18	80.1%		HOIG
PGF 2 Yield 2 03/13/09 8.35 19.00	7		HXG	2	High Yield	2	02/20/06	86.69	83.83	37.92	74.0%		Hold
ion XIV 10/06/15 27.29 29.59	ε	PS Finan. Preferred	PGF	2	Yield	2	03/13/09	8.35	19.00	8.90	234.1%		Hold
ion XIV 10/06/15 27.29 29.59													
XIV 10/06/15 27.29 29.59	Core												
	_	VIX inverse	XIX				10/06/15	27.29	29.59	ı	8.4%		Add

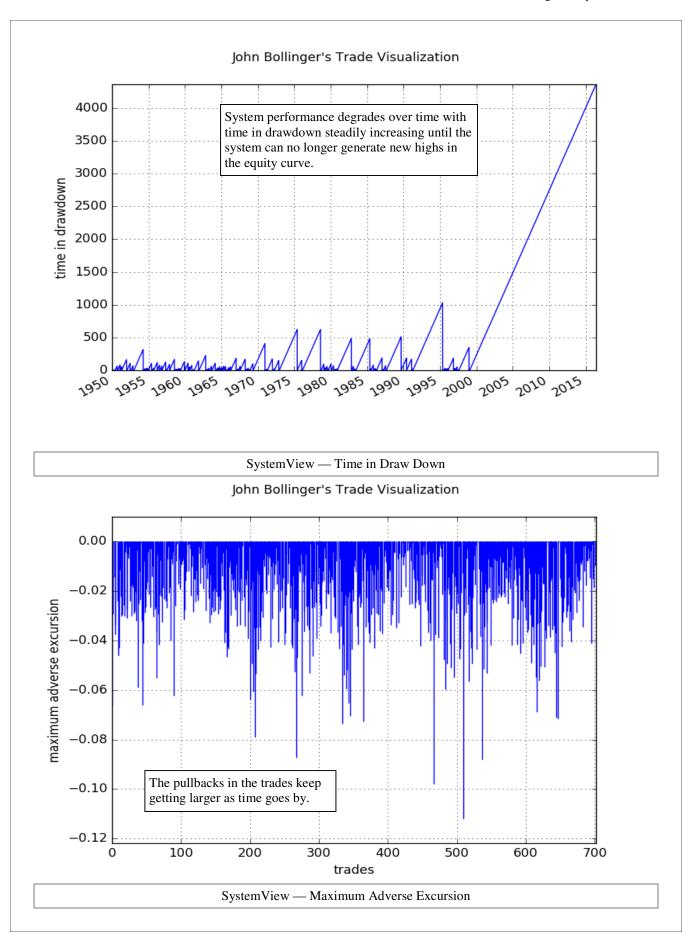
Portfolio Notes: Smaller, rather than larger stocks is generally where your emphasis ought to be. Value continues to maintain a small edge over growth, which might make sense given the relatively high valuations for stocks. The Value Line Plan is in the market with a Friday sell stop of 450.90. The Value Line Geometric stands at 462.73. This pullback is creating a perfect opportunity to add to our XIV position. There were no changes to the ETF portfolios this week, though Global Telecomm, IXP, is on the cusp. We remain cautiously optimistic about US stocks, but wary about the larger, global picture. The next hurdle is Brexit in less than two weeks. Energy and basic materials are two sectors rife with good long-term stock ideas. One thing that worries is the massive open interest in VIX products, I can't imagine that ending well; top of my worry list.

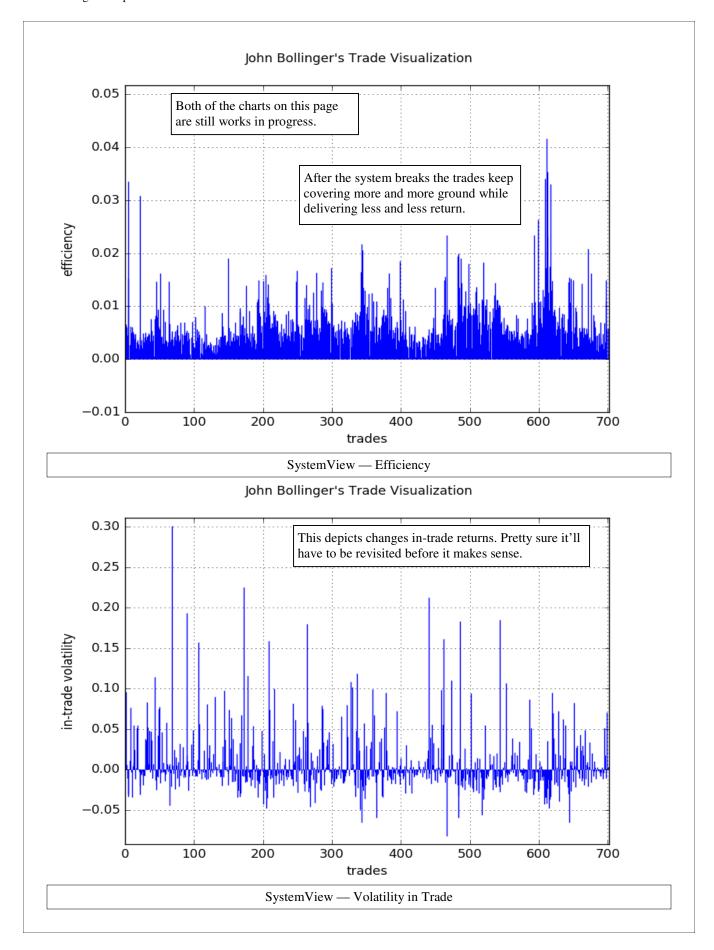
John Bollinger's Capital Growth Letter is published monthly by Bollinger Capital Management, Inc., P.O. Box 3358, Manhattan Beach, CA 90266.; Phone: (310)798-8855 Website: www.BollingerBands.com E-mail: BBands@BollingerBands.com Subscription rates: \$300 a year, 3-issue trial subscription: \$50. This newsletter contains information obtained from sources we fully believe to be reliable; however we do not guarantee accuracy. Although opinions expressed herein are based on sound judgment and research, no warranty is given or implied as to their true reliability. The responsibility for decisions made from information contained in this newsletter lies solely with the individual making those decisions. It should not be assumed that recommendations made in the future will be as profitable or equal the performance of the securities in this list. Officers of Bollinger Capital Management, Inc. may at times have positions in securities mentioned.

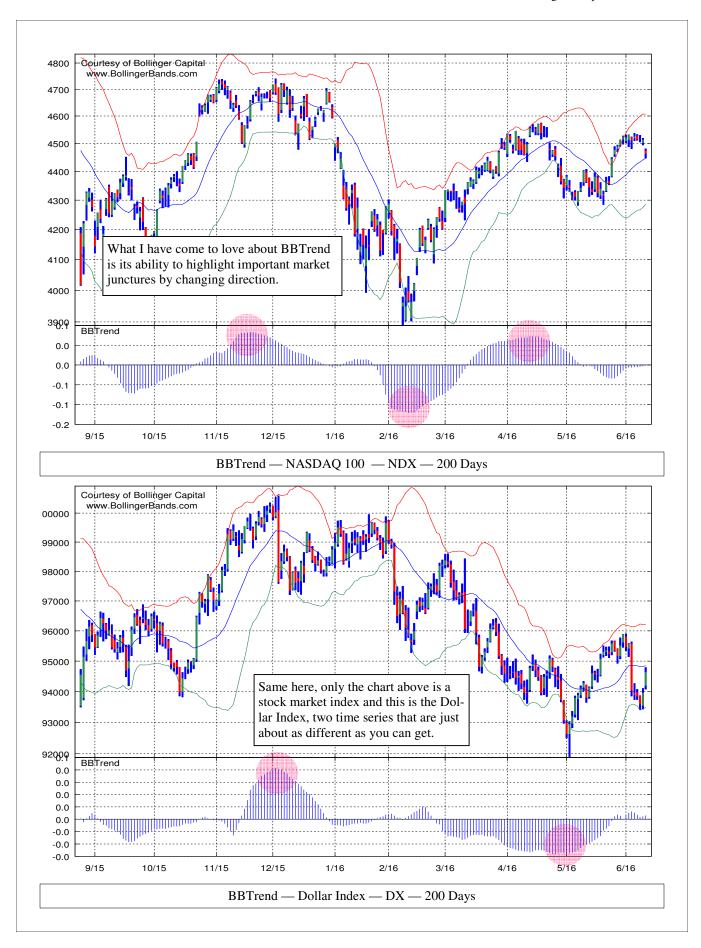
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First record 1950-01-04, 16.85
Last record 2016-05-31, 2100.129883
There were 702 trades.
There were 286 winners.
There were 416 losers.
The average win was 3.33%.
The average loss was -1.27%.
The total gain was 4367.49%.
The annual gain was 5.93%.
First trade 1950-07-31, 0.096
Last trade 2016-05-06, 0.003









taught and practiced for the past 50 years. He avers that the entire idea of buy and hold and earn your nine or ten percent a year is a crock, an artifact derived from a black swan, or at best a gray one, academic orthodoxy be damned. Go Bill! I have long had great admiration for you and what you have accomplished.

As long-term readers know, I have held that exact opinion for 20 years or more. Simply put, the facade of modern finance rests on a rotten foundation. Passive investing only works in certain historical periods of intense economic growth, like the post-depression, post-WWII period when the economy is roaring and demand far exceeds capacity. In such an environment of course buy-and-hold works, but in more normal times when the world's economies are struggling for advantage and competition, the name of the game is active investing—it is the only key to success. So where are those buy and hold returns when the Baby Boomers need them the most, as they enter retirement? To wit: The long-term returns for the S&P 500 are approximately 9% nominal

and 6.9% adjusted for inflation; since 2000 they are 4% and 1.8% adjusted for inflation. And the future outlook is complicated by the idea that stock valuations are historically high and bond yields are historically low, so returns going forward will almost certainly be below average or worse. Not to fret, it is just time to throw away the accepted wisdom about investing; time to start EARNING returns instead of hoping for them to show up on their own. Active investors rule!

Appearances

My Bollinger Band YouTube playlist offers free videos about Bollinger Bands, how to best utilize BBands.com and the various Bollinger Band Tool Kits. It's a great resource.

https://www.youtube.com/channel/UC26gO6DZGr0WUddKnUB1cDQ

