

# THE BOLLINGER BAND LETTER

"Since all models are wrong the scientist cannot obtain a "correct" one by excessive elaboration. On the contrary following William of Occam he should seek an economical description of natural phenomena. Just as the ability to devise simple but evocative models is the signature of the great scientist so overelaboration and over-parameterization is often the mark of mediocrity." George Box, 1976

## The Bounce

I have a feeling that the bounce might work this year, indeed it may already be working, but perhaps not for the usual reasons. In the classic sense of the term the bounce works because certain stocks are sold off for non-market reasons and bounce back as soon as the selling pressure abates. Tax selling is an important factor, but portfolio window dressing is an important influence as well, as are group/sector/style factors when driven by psychology rather than economic reality, "That sector has NO future" or "Correct" investing trends, such as no tobacco, gambling, or an emphasis on ethical companies to the detriment of their fallen kindred and the like can help create bounce stocks as well. I suspect that we aren't going to get too much in the way of a classic bounce this year, though there may be some opportunities driven by tax selling of losers to offset profit taking. What I do think might be a factor this year is FOMO, "Fear of missing out".

The term is well-known and widely used in the cryptocurrency community, where it is thought to have reinforced or even powered the spectacular rally in Bitcoin, BTC, and some of the other crypto-currencies. Technicians who have studied the ideas of contrary opinion in general, and the work of Humphrey Neill in specific, will recognize that this idea has deep roots. Indeed, it sits squarely in a gold mine of ideas about the psychology of the market cataloged by Neill. For example, "Greed is fear of not having enough". These seemingly trite handles are latched onto powerful ideas that can help one understand what is going on in the markets, especially at times of high momentum or at extremes.

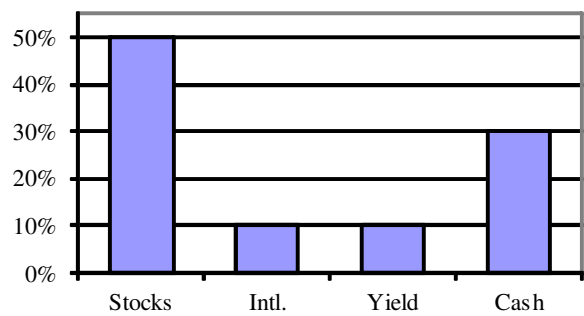
My thought is that if we do get a bounce it'll be in the under-performing sectors as the FOMO crowd piles into lagging stocks: "That's where there is still opportunity." Also money rotating out of the hot sectors, the ones that

have done the best this year, and into sectors that are seen as still offering some opportunity should be a factor too. Using the same list of S&P equal-weighted sectors that we introduced for our sector analysis last month I calculated the twelve month percent rate of change and found only two sectors that were down on the year; energy and telecom.

Instrument Name	Close	12 Month
S&P EW INFO TECH	10531.4297	33.1743
S&P EW HLTH CARE	14949.7324	23.5519
S&P EW MATERIALS	5078.3081	22.4232
S&P EW FINANCIAL	7950.1616	22.0671
S&P EW INDUSTRLS	6309.0688	21.8012
S&P EW UTILITIES	4845.2524	19.1125
S&P EQW TOT RET	7044.3501	17.8176
S&P EW TELE UTIL	1417.8864	14.3612
S&P EW CNSMR DIS	5434.0679	13.3996
S&P EW CNSMR STP	8828.7266	12.8932
S&P EW ENERGY	3476.6392	-12.0319
S&P EW TELECOM	2618.1064	-15.2140

I've written about energy being a source of funds rather than a use of funds for some months. Luckily, I have some smart readers, one of which lives down in the oil patch and is a great source of ideas and information on the energy sector. He reminded me of one factor that I had totally missed, Saudi Arabia is getting ready to float Aramco. Currently the debate and news are all centered around where it will list, but the fact of the listing is much more important. It suggests several things. First, that the Saudis share my opinion about energy being a

## Asset Allocations





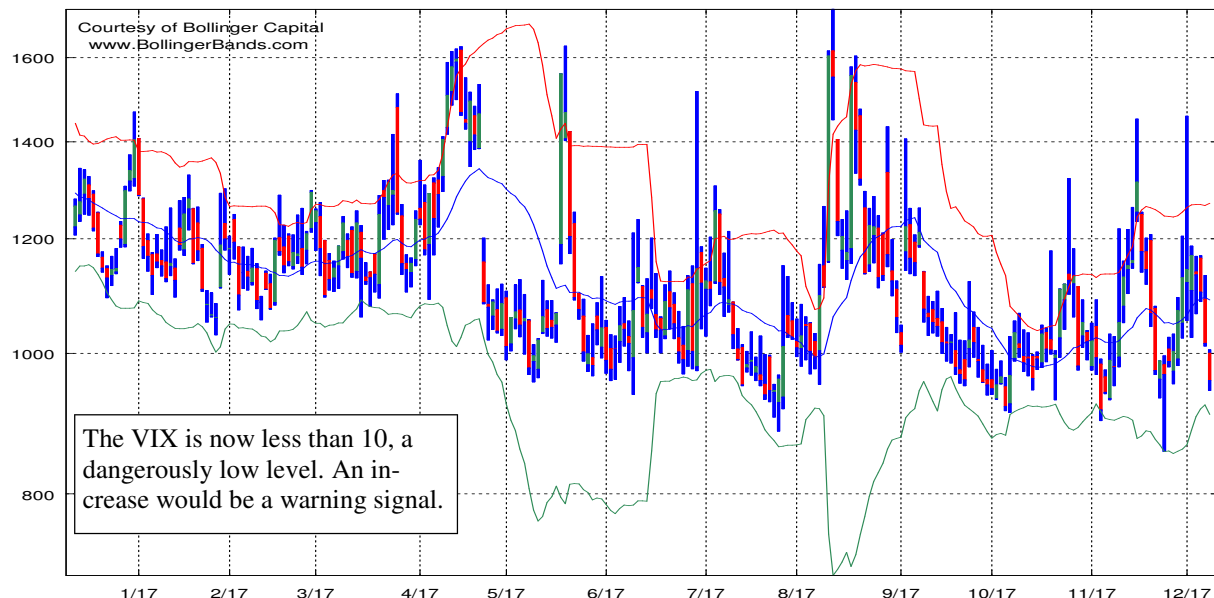
Value Line Arithmetic — One Year

source of funds. Second, it suggests a very carefully managed crude-oil market up to and initially somewhat beyond the IPO. The bottom line is that I wouldn't expect any significant downside until well after the IPO; instead I would expect improving oil prices through the IPO. And that explains a lot about why the oil stocks have been so reluctant to echo the rally in the crude oil price. OPEC can and does control the price of crude, but the oil stocks are a much bigger market than crude and a bit beyond even OPEC's mighty grasp.

down on the year, the disruption caused by the mental (meme) shift away from fossil fuels, but I haven't a clue as to why the telecomm sector was down. If anything I would have expected it to benefit from all the interest in technology, most of which touches on telecomms in one way or another. But there you have it, the worst 12-month sector performance by far, down more than 15 percent, against infotech's best of class 33 plus percent gain, a whopping 48 percent divergence.

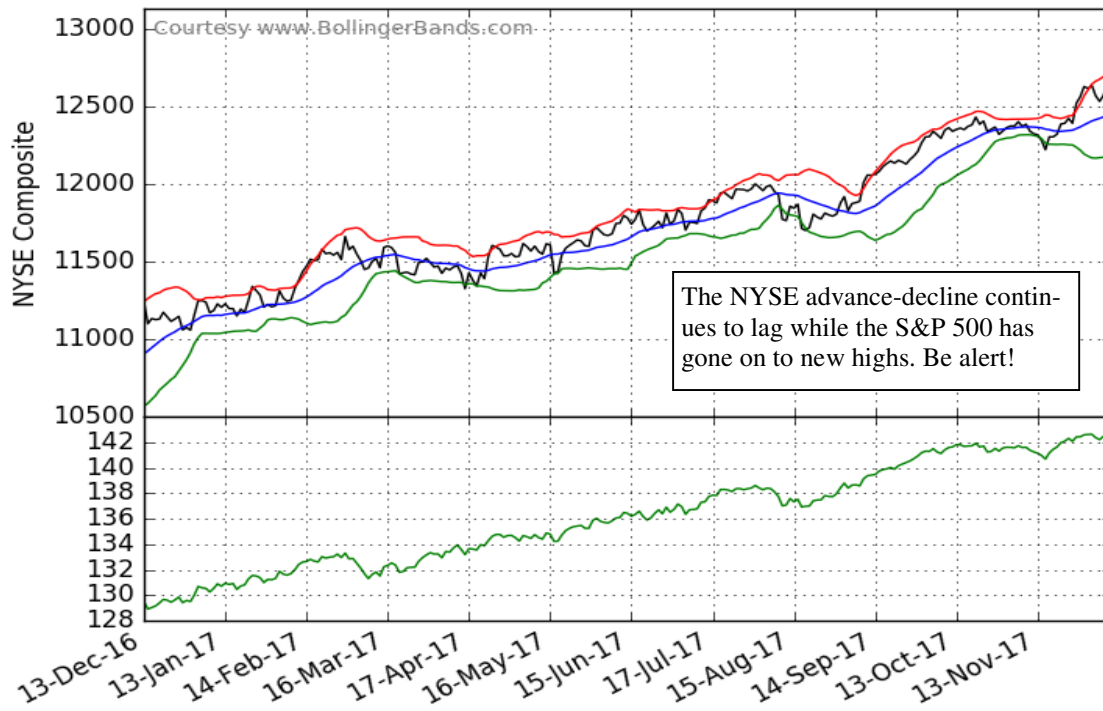
I think that I understand why the energy sector was

A general rule about long-term sector performance is that the best will become the worst and the worst will



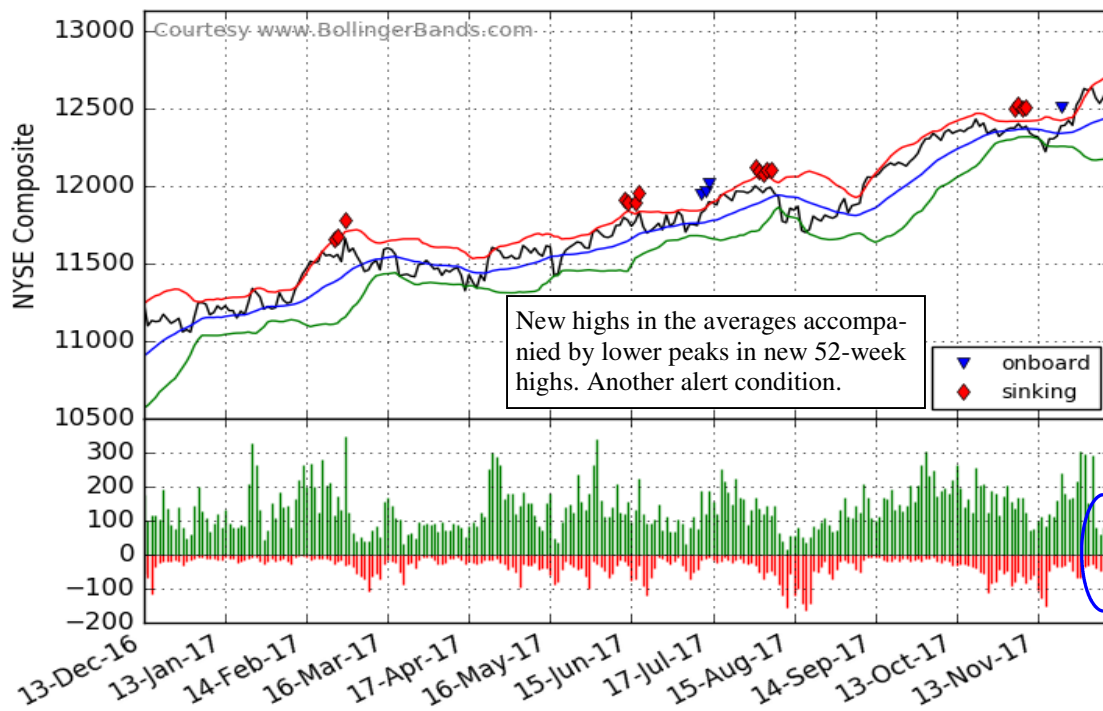
The Volatility Index — VIX — One Year

Chart 7: NYSE Advance-Dcline Line

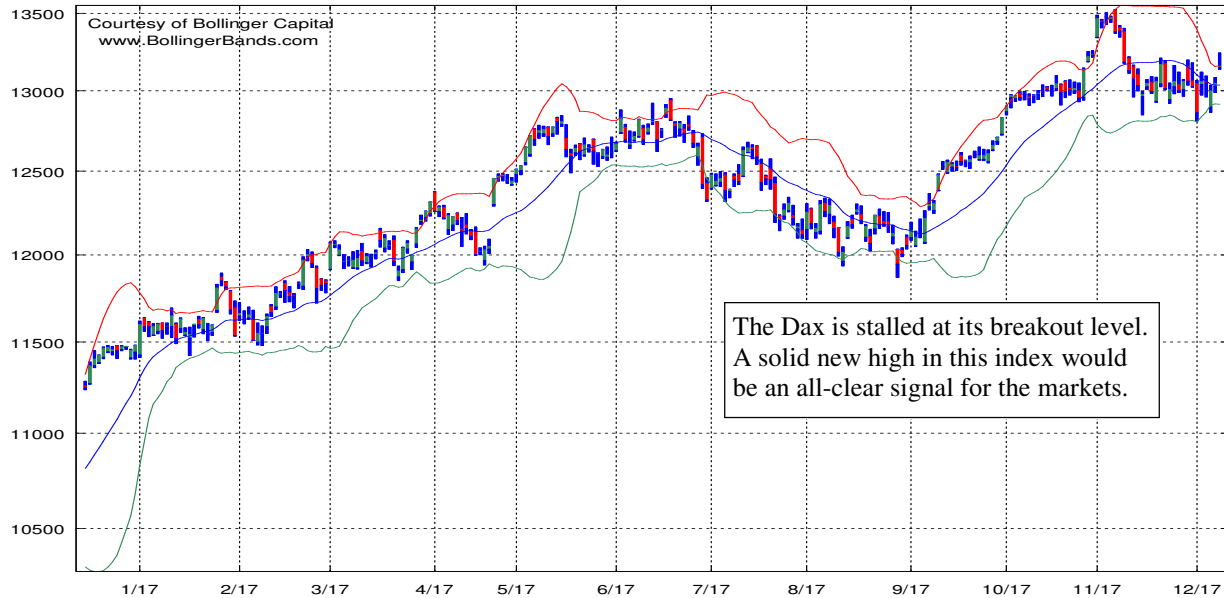


S&amp;P 500 and NYSE Advance - Decline Line — Daily — One Year

Chart 10: NYSE New 52-week Highs and Lows with Titanic Markers



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



DAX — Daily—One Year

become the best. In reality that rule is actually anything but iron clad, but the idea behind it is empirically correct. For example, we learned over the years that you didn't want to buy the top quartile of the GroupPower sector or group list; you wanted instead to buy industry groups and sectors rotating up in the list. Of course there are the famous studies of year-over-year sector performance reversing returns the next year, but those always seem arbitrary to me. Why December or January, why not month by month or some other more thorough approach? Is there actually a sector clock ticking back there? I don't think so. In general when it comes to large

aggregations like group and sectors look for long term overbought and over-sold conditions to reverse. Think of it this way. By the time enough stocks get to sufficient extremes to drive a group or sector to an extreme, it is probably time to consider a move in the opposite direction.

In any case telecomm is the worst sector for the year and it is starting to bounce and is offering up some pretty good prospects. I think that the easy way to play this is via the telecomm ETFs; iShares' IYZ and Vanguard's VOX are the ones we will track. I also like global tele-



Nikkei 225 — Daily — One Year

Instrument Name	rank	-1 week	-2 weeks	-3 weeks	-1 month	-1 quart	Ticker Symbol
S&P EW CNSMR STP	4.2173	1.7278	0.4181	-1.7925	-6.0214	1.2823	.SPXEW30TR
S&P EW CNSMR DIS	2.1217	0.0113	-0.9195	-2.0399	-4.1321	-0.4963	.SPXEW25TR
S&P EW FINANCIAL	1.9264	0.4576	-0.1946	1.4363	4.7999	-4.1253	.SPXEW40TR
S&P EW INDUSTRLS	0.1493	-0.4986	-1.6347	-0.7815	1.6891	-1.9952	.SPXEW20TR
S&P EQW TOT RET	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	.SPXEWTR
S&P EW MATERIALS	-0.2415	-0.0848	0.9027	0.7919	2.8706	0.5573	.SPXEW15TR
S&P EW UTILITIES	-0.4263	2.5038	1.5645	1.2347	-2.5574	7.1173	.SPXEW55TR
S&P EW INFO TECH	-0.8146	2.6975	5.6900	4.3839	4.6730	2.1027	.SPXEW45TR
S&P EW TELE UTIL	-1.6555	0.7816	-0.1881	-0.2018	-3.0709	5.6564	.SPXEWCTR
S&P EW HLTH CARE	-3.0154	-2.2517	-2.0741	-3.4559	-5.3854	1.1979	.SPXEW35TR
S&P EW ENERGY	-3.1212	-4.2081	-4.1635	1.0532	7.3157	-3.2947	.SPXEW10TR
S&P EW TELECOM	-11.4084	-12.7205	-14.7254	-13.5651	-8.9645	-5.0797	.SPXEW50TR

GroupPower Sector Table

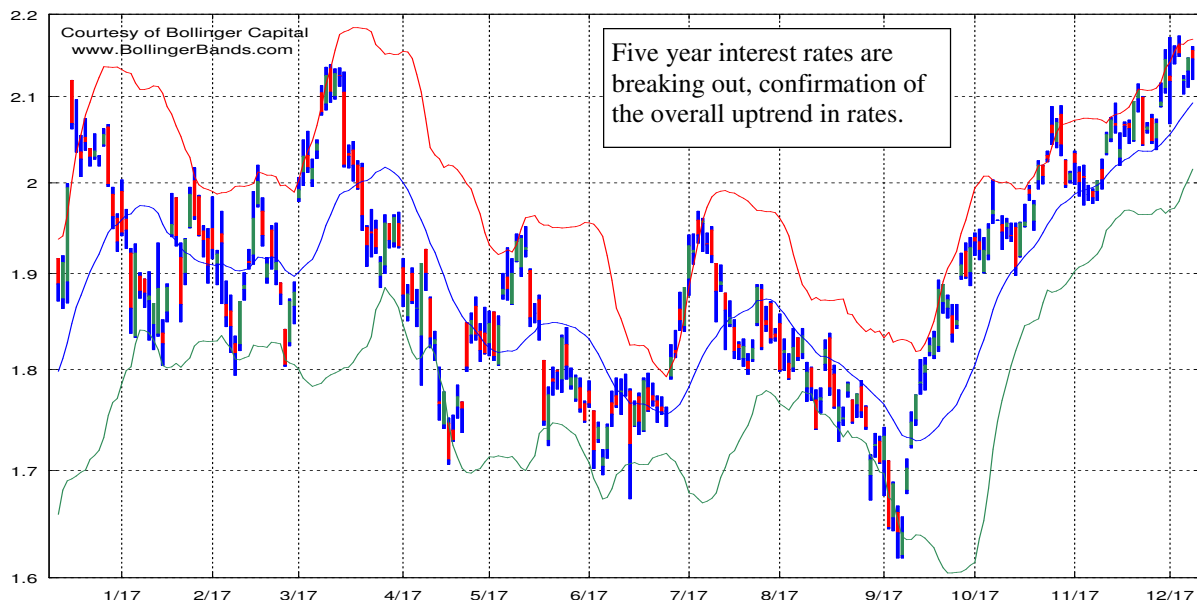
comm prospects, so I'll add IXP to the mix.

## The Stock Market

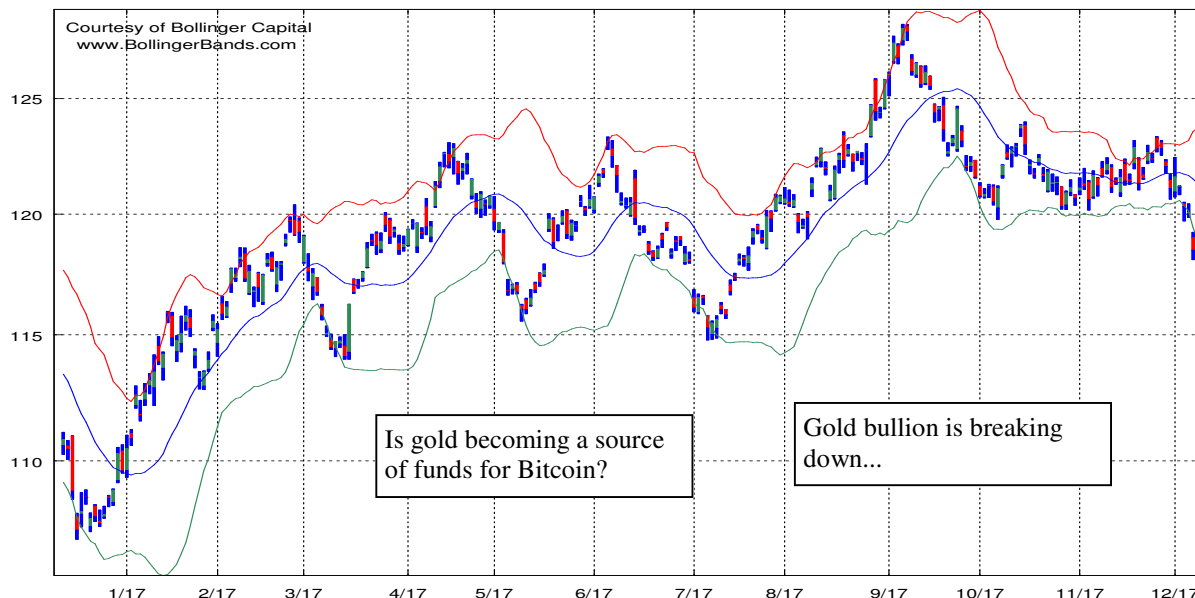
For the KISS crowd: The stock market remains quite healthy and strong enough (so far) to skip over the usual fall decline. The advance – decline line, the most basic measure of market health I follow, remains strong, as do its main variants. The truth is that if I were allowed to look at only one market-timing tool (other than price) it would be the NYSE advance – decline line. Second would be the lists of stocks making new 52-week highs and lows. In fact I could do a pretty good job of market

timing with just that information. Other tools can and do help, but for stock-market timing the tools derived from advances, declines, new highs and new lows, all from the NYSE, are hard to beat. Add some price tools like Bollinger Bands, %b and BandWidth, and maybe a volume indicator like Intraday Intensity, and you are pretty much good to go.

Years ago I remember opining to my mentor that I thought you could trade just the new highs list. He agreed. ("Pick a system, any system, and use it!" was his motto.) Turns out that was pretty much spot on. Sometimes we get so wrapped up in what we do that we for-



10-Year Interest Rate Index — IRX



Gold Bullion ETF — GLD — One Year

get the basics; you want to buy what's going up and sell what's going down. To wit, the old saying: "When your up to your ... in alligators you forget that you came to drain the swamp."

KISS is an acronym for "Keep it simple, stupid." Interestingly the comma and its meaning have been hotly debated. Some think of it as a command followed by the demeaning epithet, "stupid". I prefer the meaning that things should be kept as simple as is practicable so that even the 'stupid' can understand and use them. To clarify, think of the world in which KISS arose. It was a

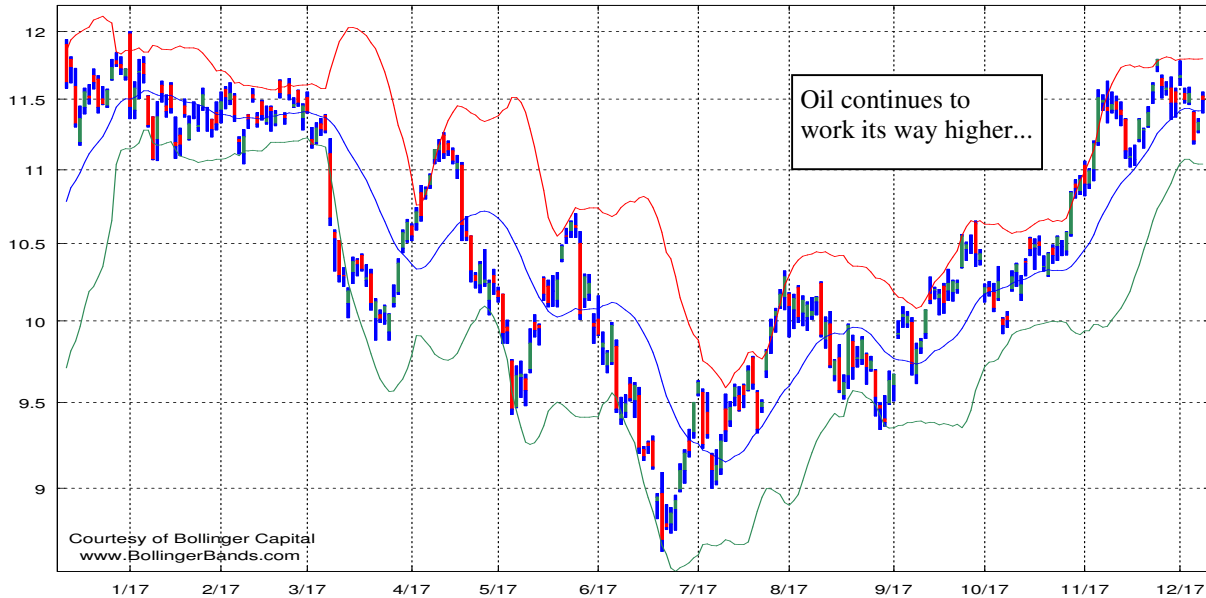
mandate to create and design combat aircraft so they might be maintained under the worst conditions with just a few simple tools by an ordinary Joe. This view is further supported by cockpit design where the flap handles are shaped like flaps and the landing gear handle is shaped like a tire; all designed to help an injured/confused pilot functioning at a small fraction of their true capability get back home safely. So, KISS was a call to excellence, not a put down.

Some variation of KISS has always been at the core of my operations. I can't tell you the number of times I



Gold Miners ETF — GDX — One Year





Crude Oil ETF — USO — One Year

have seen complicated trading systems/approaches, curve-fit monsters that were better off being tossed than used. Ice Breaker is a perfect example of a KISS approach, a dead-simple system that is derived from first principles and that has been working successfully for decades. Below is a table of its recent results for each of the five ETFs we currently track with it. (I am currently at work with the good folks at TradeStation to create a version of Ice Breaker for their platform.)

Symbol, Positions, Avg Gain

DIA, 2, 12.6%

IJR, 1, 4.0%

MDY, 3, 10.9%

QQQ, 1, 8.3%

SPY, 3, 9.5%

These position were taken in mid-August. As usual, please note that the default is to allow Ice Breaker to take up to three positions at a time.

Please don't forget to have a look at the chart pack.



Oil Stocks — XOJ — One Year

## Bollinger Bands

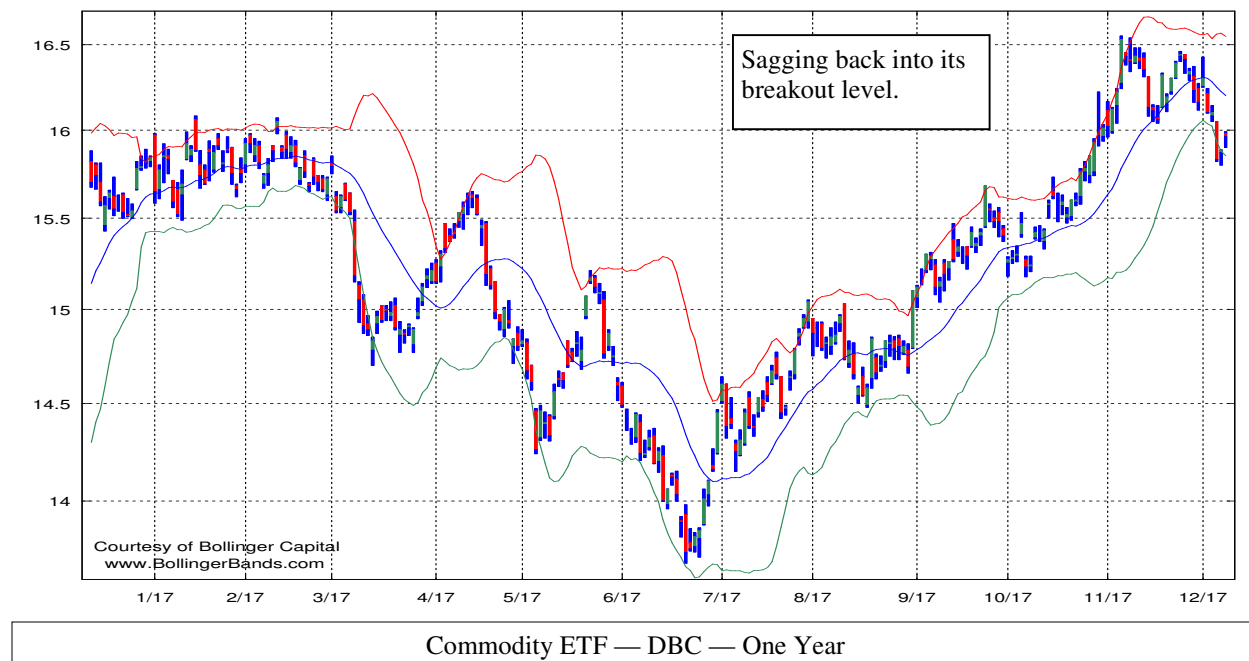
I just returned from teaching Bollinger Bands in Japan. I taught two classes, a week apart, one in Tokyo and one in Osaka. Both classes were sponsored by the NTAA, the Nippon Technical Analysis Association. I had taught a similar course for them in the spring on the island of Kyushu. (Perfect timing, cherry blossoms in the spring and Japanese maples in full fall colors.) That makes three talks on Bollinger Bands in less than a year. Each was well attended, with capacity crowds at each venue. I was struck by the passion for technical analysis in general and Bollinger Bands in specific. The attendees didn't seem to be the star struck "I can trade for a living" types of the Internet bubble. There was more earnestness, and a willingness to work and learn was clearly evident. The crowds ran much more balanced in terms of gender than is typical in the US, where trading crowds are largely male. No one got up and left during the talks, they were clearly there to learn. All-in-all, it was a good experience for me and the attendee reviews indicated that it was a good experience for them as well. That is particularly interesting as we used consecutive translation, where I say a sentence then pause while the translator says it in Japanese, then I say another sentence... While that process assures good/clear translation, it breaks the rhythm/flow of the presentation by asserting its own dynamics that burdens the didactic process.

I thought a lot about Ichimoku Kinko Hyo while I was in Japan and talked with a gentleman who knew a great deal about that charting technique, which is known as

cloud charts in the US. Originally my idea had been to combine Ichimoku and Bollinger Bands, but I no longer think that is the best way to go. Ichimoku is of a piece and I don't think that additions, deletions, modifications or constant changes and the like will help; it is what it is and that is good enough. That doesn't mean that I am abandoning the idea. On the contrary, I am more interested than ever, but my base will be a normal Bollinger Band chart to which I will add some of the lead and lag features of Ichimoku. In other words I intend I merge some Ichimoku ideas into a Bollinger Band chart. I think that this is a MUCH better approach and have already begun experimenting. Leads and lags are at the heart of this idea, ideas that I explored long ago and dropped. Perhaps using Ichimoku as an intellectual template will provide some guidance in this area. If you are wondering what all the fuss is about, try this. Plot a 20-period simple moving average on a chart, now shift it back in time by 10 periods; nice fit eh? Now try shifting it into the future by ten periods. Chart on page 12. We are on solid ground here. Quantitative analysts and academics are all about leads and lags. For example, centered moving averages are popular, and at its heart a GARCH model is simply the projection of an average into the future obscured by complex mathematics and obfuscated with high-brow language.

## Interest Rates – View from the Beach

Each day that goes by convinces me ever more strongly that we have transitioned from a long-term bull market for bonds into a long-term bear market. I expect to see higher rates, perhaps much higher rates in the years





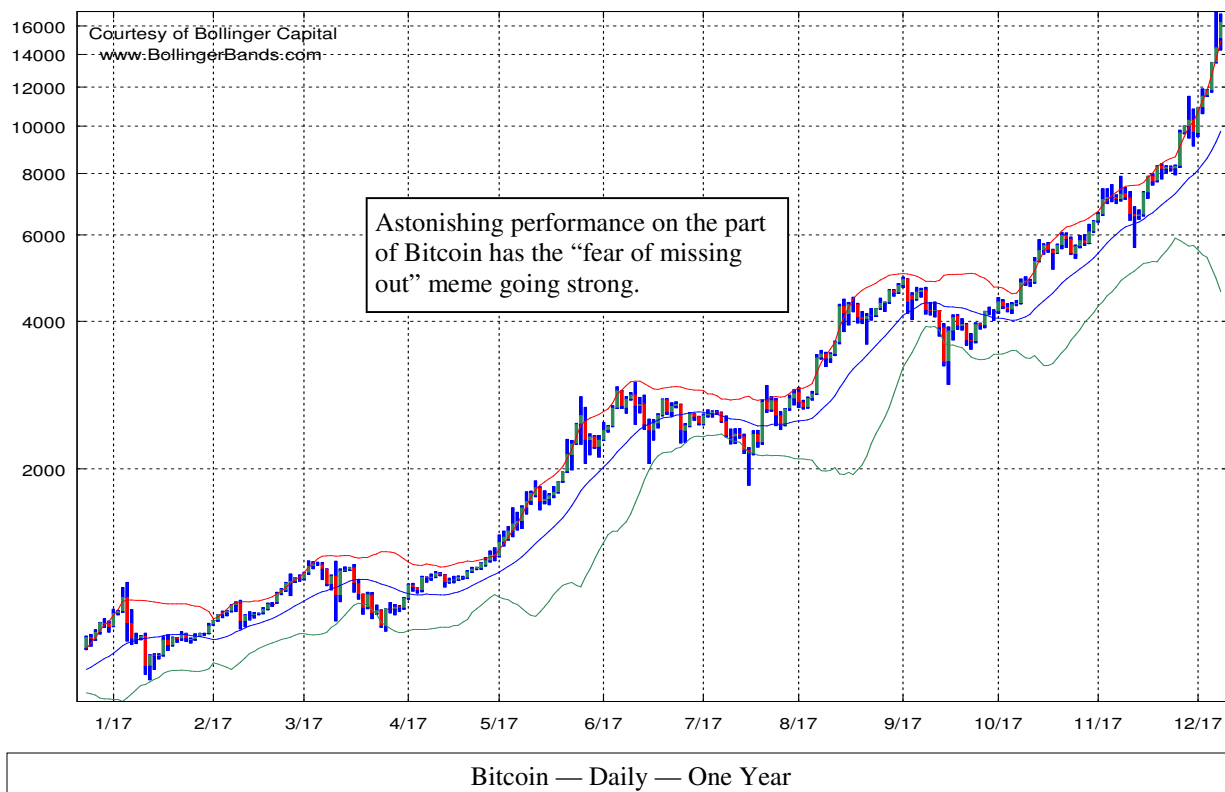
ahead as inflation builds. I have long monitored one aspect of inflation that I consider indicative, package sizes. A five-pound bag of sugar now weighs four pounds. There are many other examples of shrinking package sizes, but the latest is rather poignant for me. A pint of Häagen-Dazs ice cream is now 12 ounces. I discovered Häagen-Dazs when it was still a mom and pop operation, just four flavors as I recall, vanilla, coffee, rum raisin and boysenberry sherbet. Must have been in my early teens. Occasionally there might be other flavors, chocolate for example, but you could only get those in large tubs from the original storefront. A friend owned a coffee shop in the Park Slope section of Brooklyn. They would get a five-gallon tub for the shop whenever a new flavor was made available and we'd all gather around to taste it. Sort of a cult experience...

In any case packages are getting smaller and prices are going up; inflation is alive and well. I know that it doesn't feel that way to many, so consider this. My first trip to Japan was in 1990 and prices were hallucinatory expensive. You needed a banker to buy a cup of coffee and you'd have thought by the cost of a baby sitter that you had hired a top executive. Today prices in Japan seem normal or even reasonable. A great hotel costs what you expect and a terrific meal seems well within the bounds of reason. Best grade Japanese tea, a national treasure, now costs what top grade teas cost anywhere and a stunningly beautiful hand-made kitchen knife can be had for

less than similar quality in the US. What happened? Japan entered a deflationary phase when the bubble burst in 1990. It is not so much that prices went down, though some did. It is more that prices have been stagnant for nearly 30 years while the rest of the world experienced inflation. The bottom line is that there was a huge relative price shift, the rest of the world continued to get more and more expensive while Japan stayed the same.

Here is where I leave the pack. Economists, such as those at the Fed, the World Bank, the Bank for International Settlements and the European Central Banks all believe the same thing, that a little inflation is good, even a necessity, for growth. Not a lot of inflation, just 'the right amount'. What is that? Two to three percent seems to be the consensus. Somehow they believe that there can't be economic growth without inflation. I take the opposite tack, what we really need is price stability. Growth that is driven by inflation is illusory, not real progress at all, mostly just an escalation of the price level.

In any case I fear that we are facing rising inflation just at the time it'll hurt the boomers the hardest, as they retire and become dependent on their savings. At a three percent rate their purchasing power will be cut in half in 23 years. They'd better learn how to invest!



## Currencies

This section has been variously titled "US Dollar", "Forex" and "Foreign Exchange" along the way with no doubt a few other variations. "Currencies" seems like the right handle in an era where Bitcoin and the other crypto-currencies are redefining the way we think about methods of storing and exchanging value. For millennia the precious metals and then the currencies based on them were the best/most liquid and fungible store of value. Gradually the world has moved to ever-greater levels of abstraction. The "modern" era might well be dated to start with the end of the gold standard, which marked a complete switch to fiat currencies backed by nation states, currencies that were only as good as the promise of the backer. Some worked well and some didn't, often spectacularly so, witness Rhodesia/Zimbabwe. Gold and silver still played roles, but increasingly less important, even marginal, ones.

Enter Satoshi Nakamoto, a purposely mysterious entity that introduced the idea of a currency based on a cryptographic process, Bitcoin. Along with the currency came a decentralized record keeping system, Blockchain. Together they ushered in a nascent revolution, the idea of a medium of exchange that was not government backed, one that stood on its own without external backing/promises. Where is all this going? No one knows for sure. But it does seem clear to me that we are seeing a revolution that will change the value store/exchange landscape in profound ways. Long-term change is in the air and I severely doubt that we'll revert to the old status quo. This Sunday December 10th the CBOE, the Chicago Board Options Exchange launches futures on Bit-

coin, and The CME, Chicago Mercantile Exchange, launches its version December 18th. Welcome to the big top Bitcoin!

Blockchain is thriving too, the latest adoption announcement came from the Australian Stock Exchange, which plans to start clearing its trades via a Blockchain system.

## Bollinger Band Tool Kit

We just released Version 2 of my Bollinger Band Tool Kit for MetaStock. Included are 47 indicators, ten market explorations, nine systems tests and four trading systems. MetaStock is offering special pricing for the launch, for details on product and pricing see [www.metastock.com/johnbollingera](http://www.metastock.com/johnbollingera)

TradeStation is also offering a rebate for the Bollinger Band Tool Kit and the Bollinger Band Squeeze package with any new TradeStation account, see details here: [www.tradestation.com/promo/bollingerbands/](http://www.tradestation.com/promo/bollingerbands/)

And don't forget, Ice Breaker is coming soon to a platform near you.

## Speaking Engagements

TradersEXPO  
New York City, February 27, 2018  
The Practical Application of Bollinger Bands  
<http://bit.ly/2j81QCu>

ETF Portfolios	Symbol	Date	Purchase	Current	Dividends	Return	Rank
		Selected	Price	Price			
<b>Style</b>							(# in 21)
Core Growth	IUSG	4/24/2017	46.87	53.60	0.00	14.36%	5
Russell 1000 Growth	IWF	2/10/2017	111.06	133.87	1.12	21.55%	4
Russell 1000	IWB	1/27/2017	126.69	147.76	1.79	18.05%	1
<b>International</b>							(# in 24)
Austria	EWO	1/20/2017	17.26	23.79	0.31	39.64%	5
Italy	EWI	9/15/2017	31.25	31.35	0.00	0.32%	4
Netherlands	EWN	5/6/2017	28.91	31.56	0.35	10.41%	8
<b>Sector</b>							(# in 27)
Technology	XLK	11/10/2017	63.41	63.60	0.00	0.31%	7
Financials	IXG	12/8/2017	69.61	69.61	0.00	0.00%	2
Consumer, Disc.	XLY	12/1/2017	97.96	97.25	0.00	-0.72%	1

ETF Portfolio Holdings

## 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	265.51	9.20	35.2%	253.00	Hold
2	Russell 2000	IWM	11/02/15	118.21	151.41	3.70	31.2%		1/2
3	S&P MidCap	MDY	04/18/16	267.64	344.35	5.92	30.9%		1/2
4	Finance	XLF	10/08/16	19.75	28.01	0.39	43.8%	25.50	Hold
5	Russell 1000 (Equal)	EQAL	12/05/16	26.81	30.82	0.40	16.4%		1/2
6	Healthcare ETF	IYH	01/14/17	147.28	174.82	0.92	19.3%	160.00	Hold
7	Global Telecomm ET	IXP	01/14/17	60.09	61.22	1.03	3.6%	56.50	Add
8	S&P Small Cap	IJR	03/17/17	69.35	76.25	0.45	10.6%		1/2
9	S&P 500 Growth	IVW	03/17/17	131.81	152.22	0.69	16.0%	145.00	Hold
10	Royal Dutch A	RDS.A	05/26/17	54.63	63.46	1.78	19.4%	58.00	Hold
11	Apple	AAPL	10/23/17	156.25	169.37	0.63	8.8%	152.00	Add
Core Portfolio - International									
1	Japan	EWJ	12/14/12	44.99	59.60	1.41	35.6%		Hold
2	World	VEU	10/19/15	45.53	53.88	2.02	22.8%		Hold
3	Int'l Property ETF	WPS	05/26/17	37.43	39.32	0.39	6.1%		Hold
Core Portfolio - Bounce									
1	Telecomm	IYZ	12/09/17	28.95	28.95	-	0.0%		Buy
2	Telecomm	VOX	12/09/17	89.60	89.60	-	0.0%		Buy
Core Portfolio - Yield									
1	Barclays High Yield	JNK	02/20/09	29.17	36.76	22.37	102.7%		Hold
2	iShares High Yield	HYG	02/20/09	69.98	87.35	44.98	89.1%		Hold
3	PS Finan. Preferred	PGF	03/13/09	8.35	19.09	10.49	254.3%		Hold
Core Portfolio - Speculation									
1	VIX Inverse	XIV	10/06/15	27.29	123.75	-	353.5%		Hold
Cash									
1	Doubleline Low Dura	DBLSX	09/15/17	10.09	10.04	0.07	0.2%		Hold
2	Vangaurd Short Tern	VCSH	09/15/17	79.79	79.47	0.46	0.2%		Hold

**Portfolio Notes:** The market hasn't been able to sustain real advantage for either larger or smaller stocks, or for growth versus value. Rotation has been very rapid, the sort of thing that only short-term swing traders can take advantage of. There are several technical warnings in place, but they are not confirmed by price action so the are only cautionary notes for now. I remain constructive on stocks and will likely increase our commitment to stocks at the expense of cash if the technical picture improves a bit. Bitcoin has been on a tear, demonstrating tremendous power. With what looks for all the world like a blow-off top in place created by a technically-driven market corner and the advent of listed-exchange futures trading, the next fortnight is promising to be VERY interesting. Given the supply and exchange problems with Bitcoin I am considering Litecoin, LTC, as a trading vehicle. There is one change to the ETF portfolios this week, sell IGV and buy IXG, which is a switch from software to financials. With the Value Line Geometric Index at 555.99 the Value Line Plan remains in the market with a Friday stop of 544.16. If you want to trade the bounce I suggest two telecomm ETFs, IYZ and VOX. You can add to IXP, a holding that is also a recommended bounce candidate. You can add to AAPL here to create a full position, I'd have preferred more of a pullback, but you work with what you get. Finally, if you want to do a bit of trading, you can look at trimming XIV on strength and adding to it on weakness; it is a great vehicle for that.

John Bollinger's Bollinger Band 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](http://www.BollingerBands.com) E-mail: [BBands@BollingerBands.com](mailto:BBands@BollingerBands.com) Subscription rates: \$39/month, \$419 a year 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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