The McClellan Oscillator

I start this month with a rather long exposition on the McClellan Oscillator (MCO), but the piece is really about oscillators in general, the ways they can fool you, ideas about how to avoid pitfalls, and some thoughts on using companion technical tools. In other words the MCO is used as a vehicle for an in-depth discussion of technical trading with oscillators.

Divergence analysis sits at the core of oscillator usage. I view divergences in multiple ways, some as having forecasting power, some saying "It's time to look around, something might be up." For example, when the Advance – Decline Line goes to a new high but price does not, I look for price to catch up, but when price makes a new high with the A-D Line lagging I look around for signs of trouble. Or, when price makes a series of new highs on waning momentum I look for price to correct or worse, but I do not insist that momentum oscillators confirm price at every turn. I try to take a nuanced approach to divergence, focusing on what is causing the divergence. Is it an artifact of the indicator or an enhanced view of the data? The idea is to avoid the knee-jerk response and extract as much tradeable information as is possible.

The impetus for this piece is a friend writing about divergences evident in the McClellan Oscillator and its companion tool, the McClellan Summation Index (MCS). These tools were developed circa 1970 by Sherman McClellan and his wife Marian in Southern California, based on the work of P. N. Haurlan. They were popularized by Gene Morgan on a KWHY stock-market TV show called Charting the Market. Dave Holt, an important option letter writer of the era and author of the Trade Levels Report, is thought to have played a role as well. Though I never met Pete Haurlan, I knew Dave and Sherman well; alas Dave and Marian have passed on, but Sherman is still with us though he has retired and passed the torch to his son Tom. (I always thought that Dave Holt had one of the finest minds in the advisory business--his Trade Levels methodology is still viable today, but this section is about the MCO and MCS.)

Like so much of Southern California this work has its roots is the aerospace industry. In the WWII era SoCal

The Investing Environment

Monetary	Model	Current
Fed Model	Neutral	
Yield Curve	Positive	1.08
Money Supply	Positive	7.4%
Sentiment	Model	Current
Net Bulls	Negative	36.2
Options	Positive	0.89
Valuation (S&P 500)	Last Signal	Current
Yield		2.11%
P/E Ratio		27.27
Current Trends	Short Term	Long Term
Stocks	Up	Up
Interest Rates	Down	Down
Energy	Flat	Flat to Up
Gold	Up	Up
Commodities	Up to Flat	Up
Dollar	Flat	Down

Monetary growth is accelerating into the election.

Asset Allocations
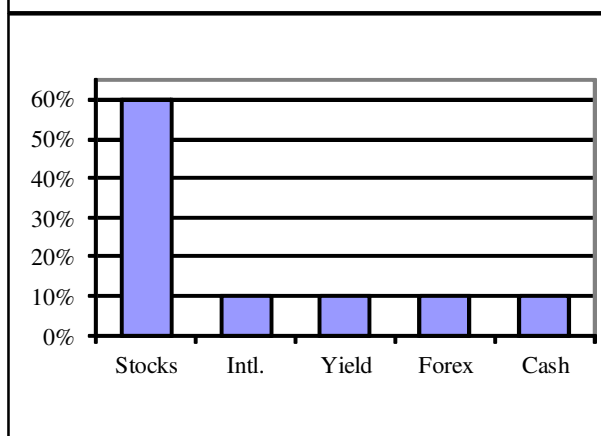
became a hotbed of technology as fighter and bomber aircraft were designed and built here. (Part of that story is the exodus from middle America in the Dust Bowl Era that infused California with an incredible pool of talented migrants ready, willing, and able to do the work.) Later rocket and satellite work took over. All of that meant that SoCal became home to a large community of bright, talented, can-do people. It was in that era that computers were first used for firing solutions and rocket tracking/navigation. The computers of the day weren't very fast so computational shortcuts to ease the processing burden were highly desirable. It turned out that Siméon Denis Poisson had developed an approach in the middle 19th century that could be adapted to the task at hand; that technique is known as exponential smoothing today and it is computationally very fast. P. N. Haurlan applied exponential moving averages (EMAs) to the New York Stock Exchange Advance Decline Line, producing market-timing tools known as the Haurlan Indices. There are three of them, short, intermediate, and long, using 3-day (50%), 20-day (10%), and 200-day (1%) exponential smoothings. The McClellan's innovation was to apply five and ten percent exponential smoothings to raw NYSE Advance-Decline data and difference the two series to create a breadth oscillator, the MCO. The MCS is a summation of the daily MCO readings. (I have often wondered if the MCS was created at the same time or somewhat later; I shall have to ask Sherman.)
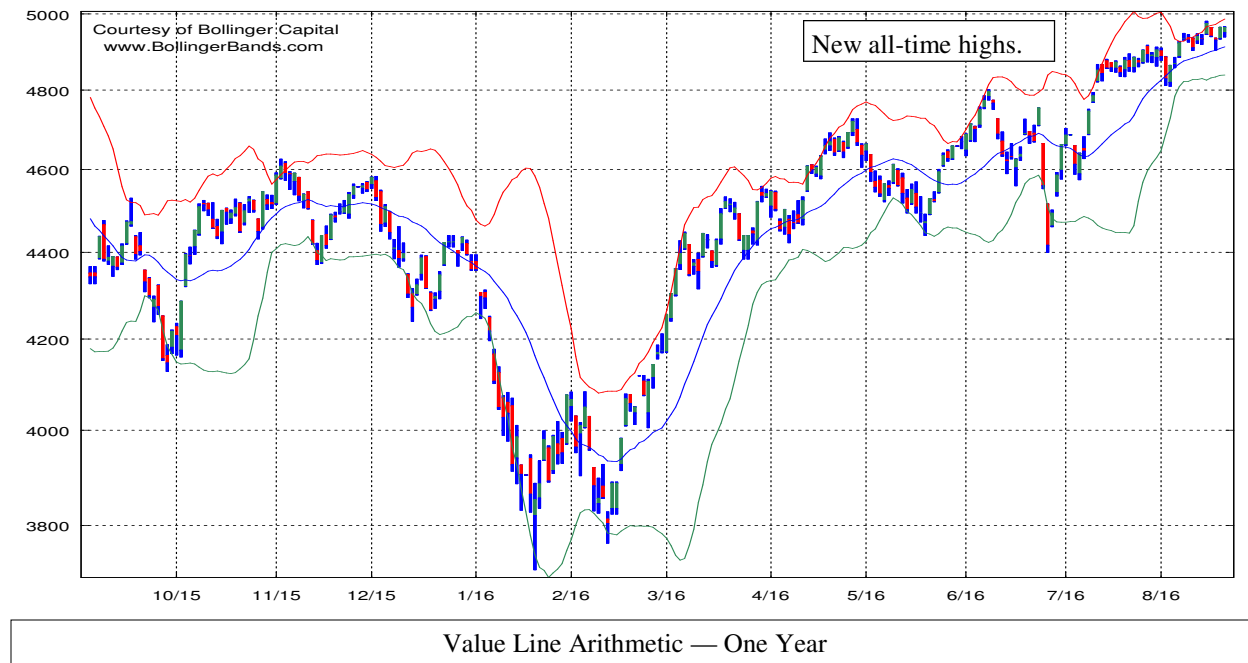
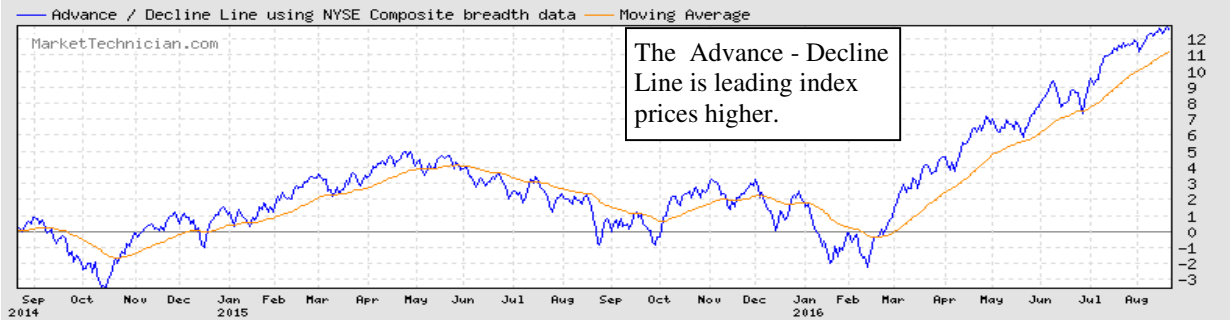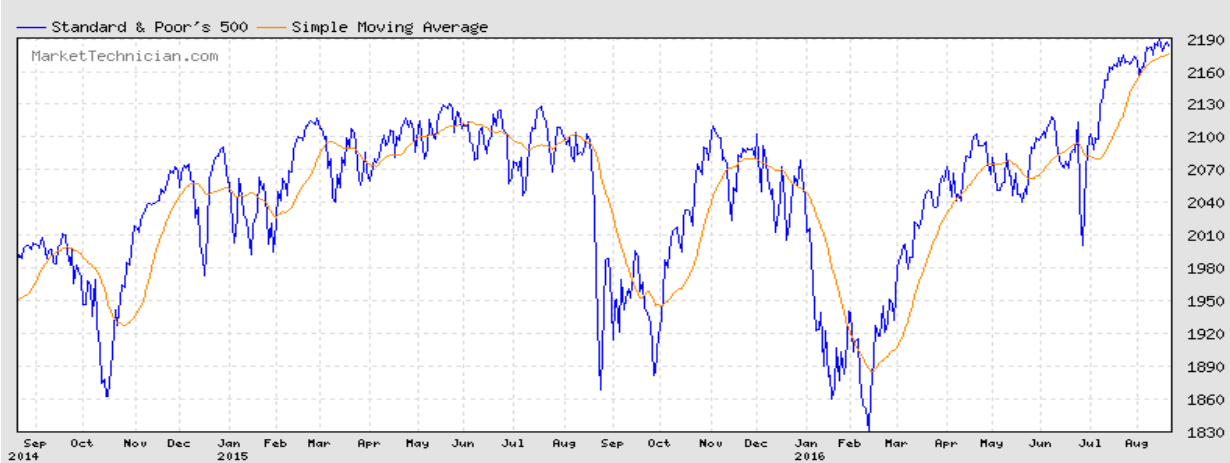Source readings: P. N. Haurlan wrote "Advanced Concepts for Market Technicians", 1974, which was published by Dave Holt at Trade Levels. In 1970 Sherman and Marian McClellan wrote and published "Patterns for Profit". As far as I know, Dave Holt never wrote a book, which I view as a great loss.

An exponential smoothing takes a portion of the current period's data and a portion of the prior period's smoothed value and combines them to produce today's smoothing, now known as an EMA or exponential moving average. The greater the proportion of the current period's data, the "faster" (more front loaded) the smoothing. To get a handle on the proper proportions for a task there is a simple formula to convert simple moving average periods into the approximately equivalent smoothing constants: $2 / (n + 1)$. For a 10-day smoothing that is $2 / (10 + 1)$ or $2/11$ or 0.1818. So a 10-day smoothing is 0.18 times the current raw data plus $(1 - 0.18)$ times the prior smoothing. Here are some sample values
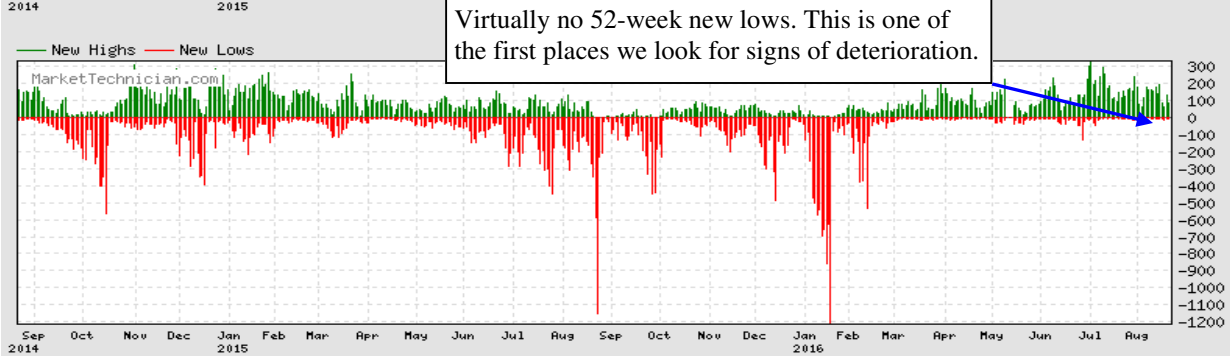
3 period = 50%
10 period = 18.2%
19 period = 10%
20 period = 9.5%
39 period = 5%
50 period = 3.9%
200 period = 1%

Exponential smoothing gives more weight to the most recent data, decreasing emphasis on older data and is thus said to be 'front weighted'. In signal-processing terms, an exponential average is a low-pass filter, which means it attenuates the high frequency information (noise) while allowing the longer trend information to

Courtesy of Bollinger Capital
www.BollingerBands.com

New all-time highs.

Value Line Arithmetic — One Year

The Advance - Decline Line is leading index prices higher.

S&P 500 and NYSE Advance - Decline Line — Daily — Two Years

Virtually no 52-week new lows. This is one of the first places we look for signs of deterioration.
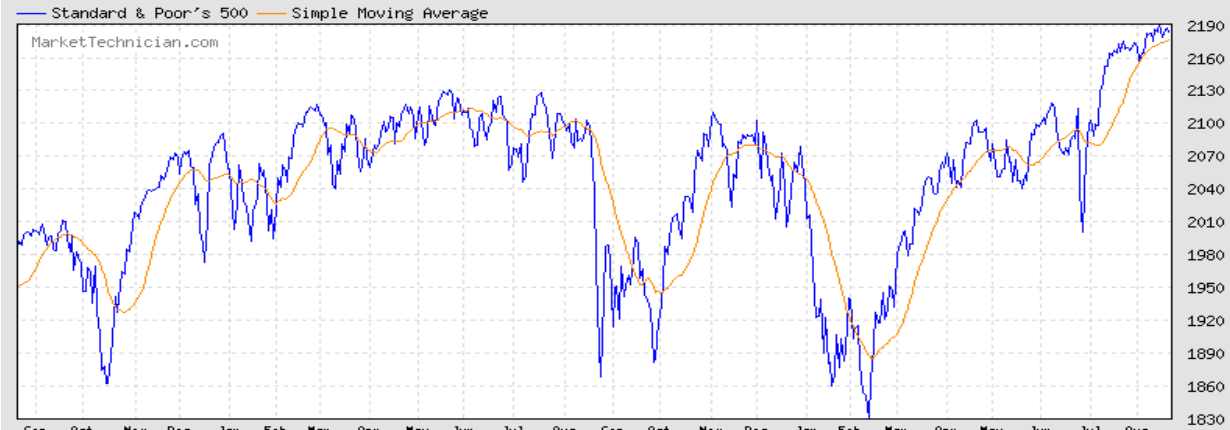
S&P 500 and NYSE New Highs / New Lows Histogram — Daily — Two Years

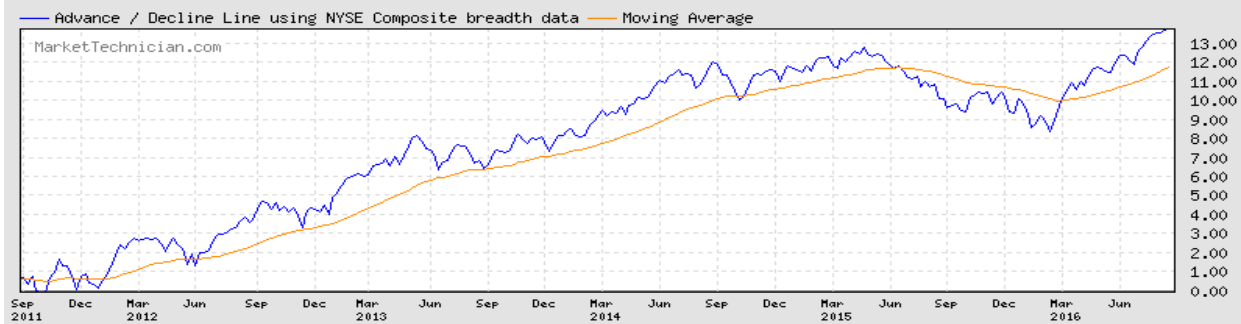The weekly A-D Line has caught up with the averages, and is now leading them higher.
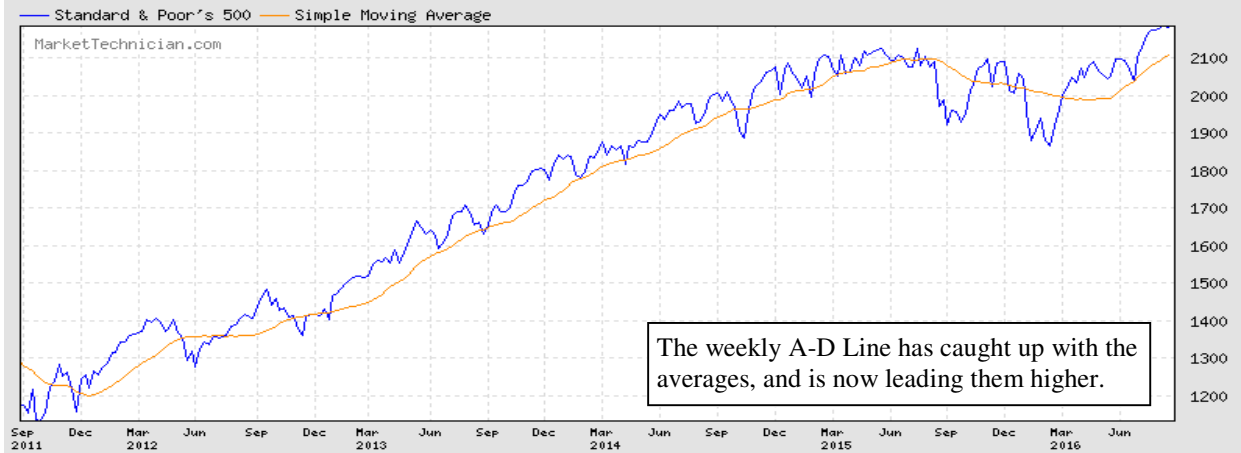
S&P 500 and NYSE Advance - Decline Line — Weekly — Five Years

No new lows in the weekly data either.
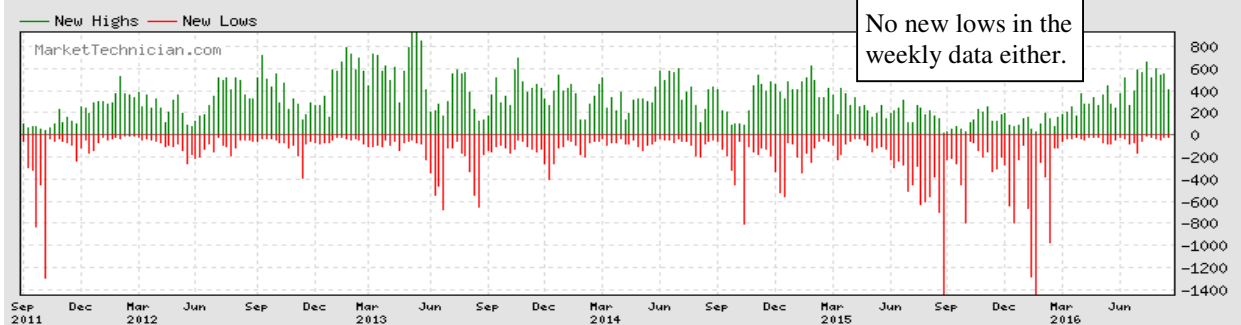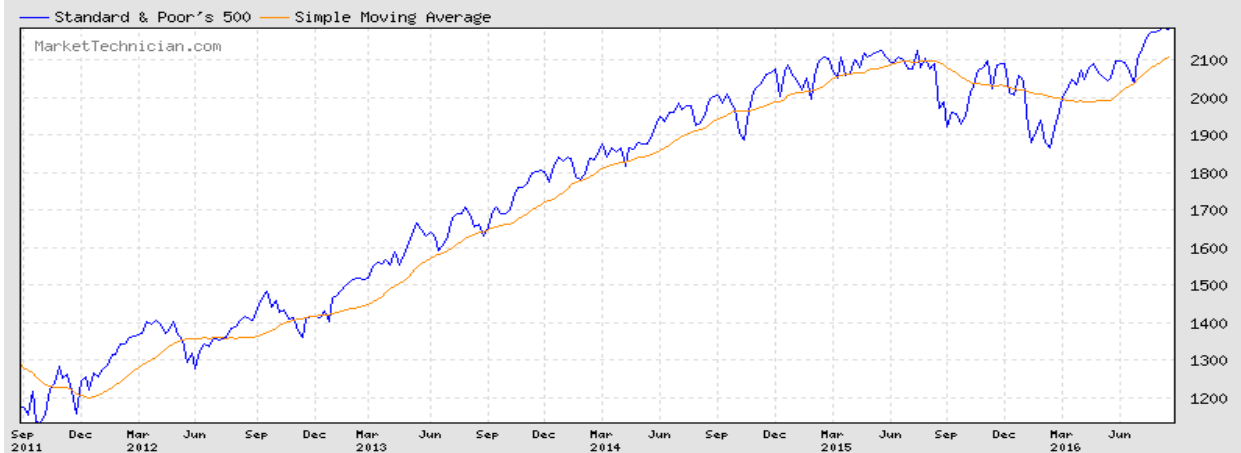
S&P 500 and NYSE New Highs / New Lows Histogram — Weekly — Five Years

A tale of two markets: The FTSE is pushing toward new high territory while the DAX languishes. Perhaps Brexit wasn't such a bad idea after all.

Courtesy of Bollinger Capital
www.BollingerBands.com

British Stocks — FTSE — Daily

pass through. The MCO is the difference between two low-pass filters, a 10% (19 day) and a 5% (39-day) smoothing of NYSE Advance – Decline data. So the MCO de-emphasizes the shortest-term trends while focusing on the difference between two intermediate term trends. It is this differential that gives the MCO its expressive power. As the market strengthens the 10% value will rise faster than the 5% component leading to improving MCO readings, while when the market weakens the 10% trend will decline faster than the 5%, leading to weakening MCO readings.

The MCO has an Achilles heel in that it is not comparable across long time spans, as the number of issues traded on the NYSE changes over time impacting the levels that the MCO swings through. That is easily fixed by normalizing the Advance Decline data as a ratio instead of using the raw numbers. The most common normalization is (adv – dec) / (adv + dec) * 1000. There is another complicating factor, unchanged issues. The distortions created by this series are less important than those created by total issues traded, but they too can be easily corrected to insure comparability: (adv – dec) / (adv + dec + unch) * 1000. This last formulation is our

Courtesy of Bollinger Capital
www.BollingerBands.com
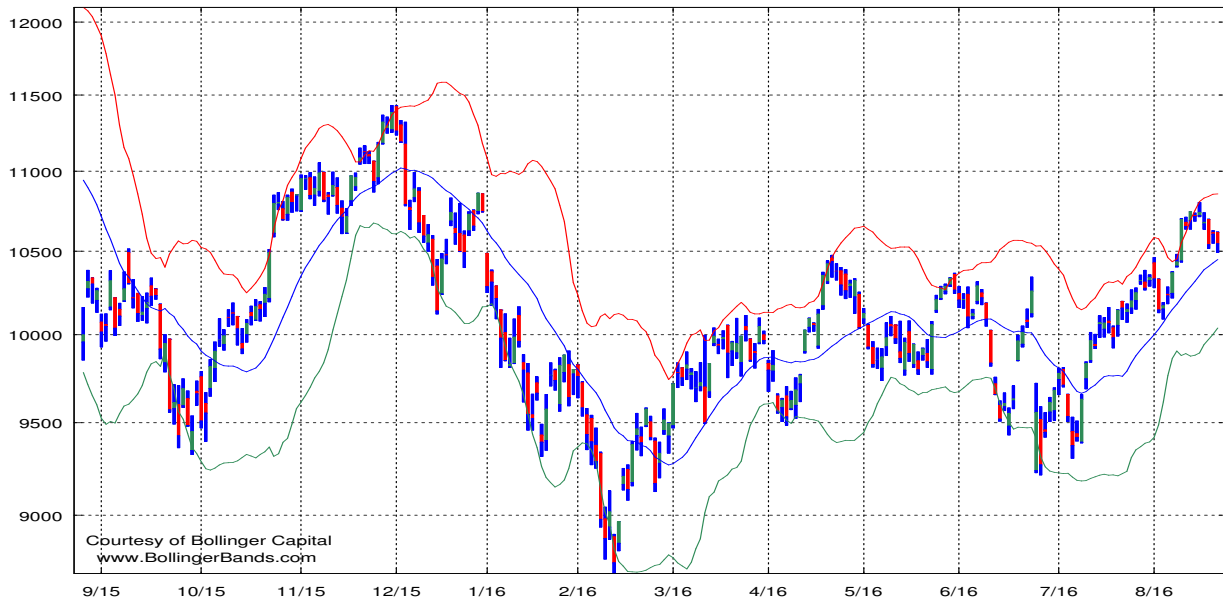
German Stocks — DAX — Daily

preferred approach.

Finally, a comparability problem can arise from the start-up values used for the MCS, but that too is easily fixed. Instead of making the MCS a simple sum of MCO values Jim Miekka (of Hindenburg Omen fame) suggested this formula: 19 * 39-period EMA of AD - 9 * 19-period EMA of AD, where AD is the Advance Decline calculation of your choice.

I have a spreadsheet with NYSE Advance Decline data from http://unicorn.us.com/advdec/ that includes the original and ratio formulations of MCO from 1965 to date. It also includes and the original MCS and Miekka's version. If you'd like a copy just drop me a note: BBands@BollingerBands.com.

One way to think about the MCO is that it is an MACD of Advance Decline data using 10% and 5% instead of the usual 12-period (15.4%) and 26-period (7.4%) constants. It is interesting to note that MACD, which is almost always used on price, and MCO, which involves the use on breadth data, arose in the same era. Clearly the core idea of differencing averages, and specifically exponential averages, to create oscillators was in play in the analytic community. That approach was originally done with simple moving averages, with the resulting displays being called departure charts, but I haven't a good citation for that. Some have suggested that the techniques used to analyze price with MACD can be applied to analyzing the MCO, but I think there is quite

a bit more that can be done to get the most value from the use of this popular indicator.

For the following discussion I refer to my breadth formulation (a – d) / (a + d + u) and Miekka's MCS formulation which runs 1,000 points lower than the McClellan's original calculation. The first thing to remember about the MCO and MCS is that they are both mean reverting by definition; so they are always going to trend towards zero in the absence of impulse power from the markets. So a downturn from a high level or an upturn from a low level is the normal behavior to be expected in the absence of motive price action.

More bad calls have been made using oscillators of this sort than I can shake a stick at, and that's a shame, because it is not the oscillator's fault. For example, with the Advance Decline Line pushing steadily into new high territory leading price higher, do you really want to take a sell signal from an oscillator based on a minor divergence? For confirmation you could check the 52-week new-high and new-low data and note that for all practical purposes that there are no new lows. If the reverse were true, if price was leading and the A-D Line lagging and new lows were starting to build up, divergences in breadth and price oscillators would be important warnings about market risk.

Here is an example of just how counter intuitive using an oscillator like the MCO can be. To illustrate I have employed synthetic data, which is our standard operating procedure when evaluating an indicator; feed it known data and see how it behaves. Armed with the

Equilibrium looks to be 1.6%. That's right, the equilibrium rate for the US Treasury 10-year Note is looking like 1.6%!!! Not too long ago such a thing was simply unimaginable.

Courtesy of Bollinger Capital
www.BollingerBands.com

10-Year Interest Rates

Gold ETF — GLD — One Year

resulting knowledge of how the indicator behaves in known conditions one can make more intelligent use of the information the indicator throws off in real time. The synthetic advance – decline data we created consists of 140 records. The first 100 records are random numbers between 1,000 and -1,000. Next come 20 periods of 1,000 and then 20 periods of 100. In stock-market terms we have a long sideways consolidation followed by an extremely strong (impulsive) rally that lasts for 20-periods and then a 20-period consolidation with an up-side bias. Although the data are artificial, they are actually pretty typical of market action. A chart of the MCO

based on these data appears at the top of page 14. The first 100 periods are unremarkable, just what you'd expect with the MCO swinging above and below zero as the market churns sideways. Then the rally hits and the MCO soars, again pretty much as expected. However, the MCO turns down at record 114, roughly two thirds of the way into the rally, which is almost certainly counter intuitive for most observers as the rally continues unabated. What is happening is that the 5% EMA is playing catch-up while the faster 10% is decelerating as it nears the data values. That narrows the gap between the two EMAs and forcing the MCO to turn down even

The gold stocks remain stronger than the bullion.

Gold Stock Index — HUI — One Year
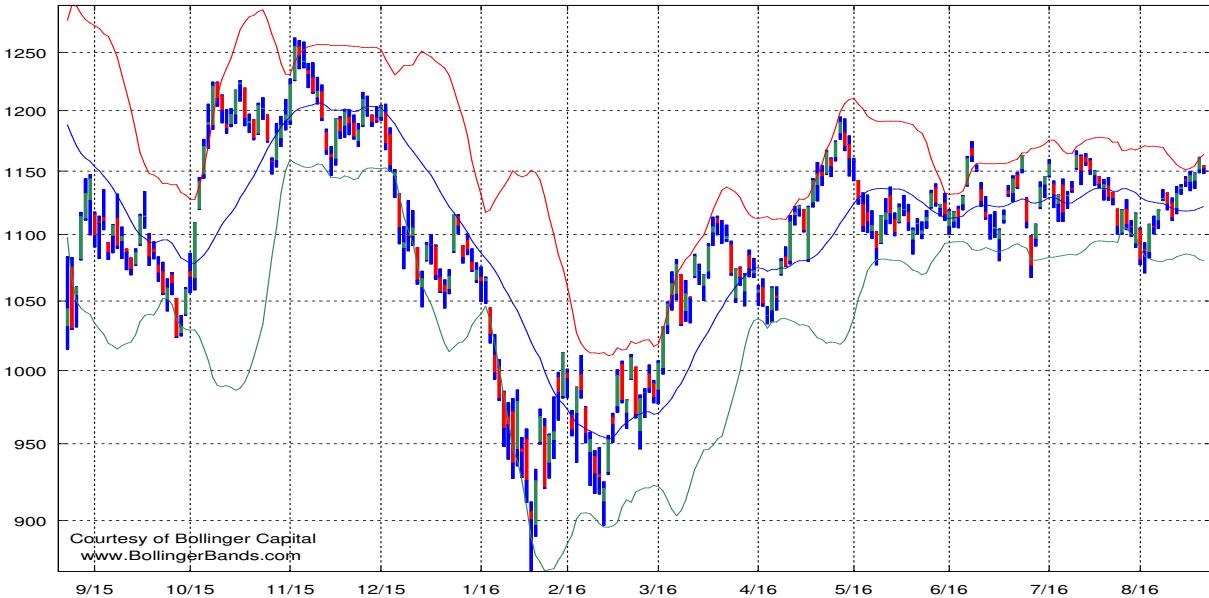
Oil Stock Index — XOI — One Year

though the rally is continuing. At record 121, the first of the 100 records, the MCO accelerates to the downside, crossing the zero line at record 127, seven periods into the consolidation. This negative crossing during a high level consolidation with a positive bias is not something most would expect or understand. Toward the end of the 100 series the rate of decline slows as the EMAs start to converge, but the MCO is deep in negative territory even though we have not had a single negative A-D reading. I have plotted the two EMAs in the second chart on page 14 so you can see what is happening to the

MCO components that drive the oscillator. MCO and MCS for the current market are plotted with comments on page 15.

My recommendation is that the MCO always be paired with other indicators. The A-D Line itself and the Haurlan indices would be great complements as would the 52-week new high and new low data and perhaps a volume indicator like Intraday Intensity based on the theoretical Dow Jones Industrial Average high, low and close data.
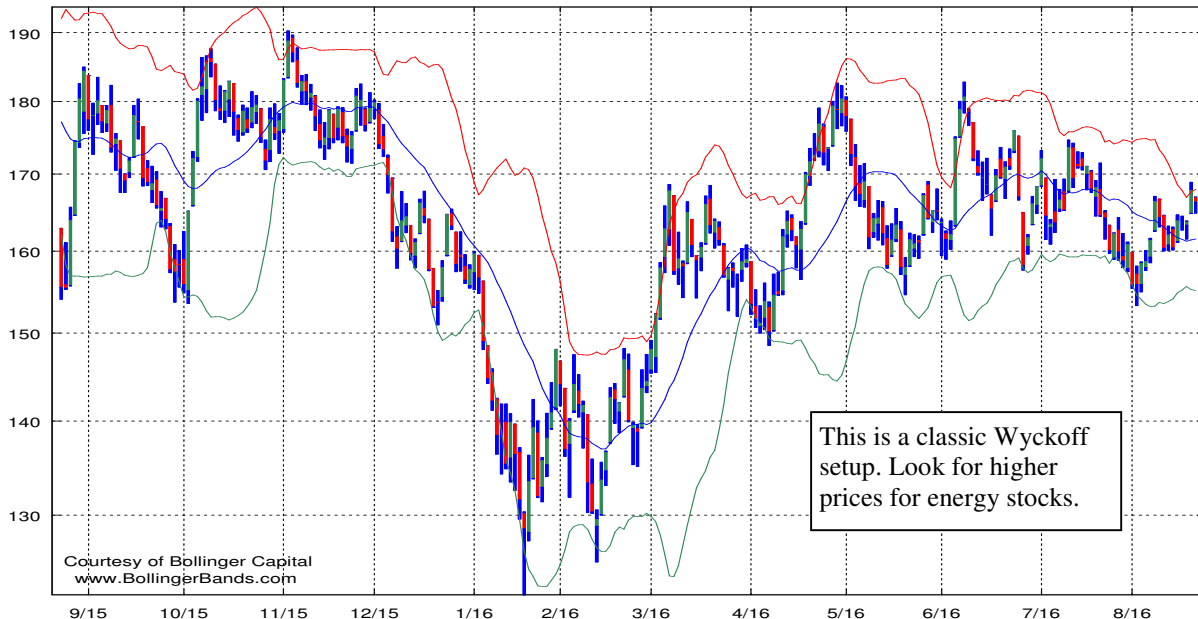
This is a classic Wyckoff setup. Look for higher prices for energy stocks.

Oil Service Stock Index— OSX — One Year

A lot of confusion arises from the differing goals of oscillator users. Some are trying to make big market calls, calls of the sort that they can hang their subscription services on. Some are trying to use them to make money in the markets. Those are vastly different worlds. Bad calls go by the board and one tries again, while bad investment decisions, either missing a rally, or worse, losing money, hurt and are hard to recover from.

Finally, the problem is not the tools; the MCO and MCS are perfectly fine market-timing tools if used intelligently. If not, they will prove to be injurious to your wealth. If in doubt, start by plotting the MCO component averages to see what is going on.

Stocks

I remain constructive on US stocks, though this is a time of the year in which I would normally be getting more cautious. The tendency for a late summer high followed by a fall/early winter low have been documented many times in these pages and by others. One factor is that the fourth year in the Presidential Cycle has the mildest downturn. See chart of Page 16. What you see is the four-year composite cycle starting from 1982 for a total of 7 complete cycles. Why start in 1982? That's the first year of stock-index futures and options, developments which changed the markets in dramatic ways. But even if we go back to 1970, for a total of 10 cycles, the picture doesn't change much. The fourth year of the cycle, the year in which the election occurs, is the mildest of the four years. Why? Because the then current administration is doing everything it can to win the elections and prevent the other party from taking over. Never has that been more true than this year where every Democrat is joining in a full court press to prevent the 'great evil' of Trump being elected. In addition, the monetary sluice gates are wide open and the fiscal pumps are working overtime. Given the strength of the stock market's internal indications I would say that the markets are getting the message loud and clear. In any case, unless we start to see some internal deterioration, which is not evident yet, we don't anticipate much more than a garden-variety correction between now and the end of the year.

Market Notes

After a long pull by middle-sized and smaller stocks with a tilt towards value, larger stocks are playing catch-up and growth is attracting some interest. Our ETF program made some switches to get in sync with these trends. No telling if this will have legs, but it is a change that should be monitored.

Ice Breaker continues to hold onto six positions, two each for SPY, QQQ and DIA, with gains of better than 10% on average.

Energy has been in a recovery mode since it made a W bottom in January/February. I think that there are lots of opportunities in the sector. We added CVX and OIH via the Hotline and are now adding Oceaneering Intl., OII, an oil service stock; all to the Core Portfolio.

I'm getting a feeling about the precious metals, that big-base sort of feeling that has me thinking about another

That looks like a normal correction in the context of an ongoing rally.

Courtesy of Bollinger Capital
www.BollingerBands.com

Commodity ETF — DBC — One Year

try at the 2011/2012 highs. With the stocks leading the way higher, so far, so good... though this seems like an arena for speculators and traders rather than investors.

The FTSE 100 is almost at a new high, while the DAX is languishing. Guessing that Brexit isn't such a bad thing after all.

Copper trying to work on a base, might be the thing to watch for a clue about an economic recovery.

Looking for more dollar weakness as the US plays the competitive devaluation game. Hold or add to Dollar Down, UDN.

Perfect place to add to DBC here, looking for continued recovery.
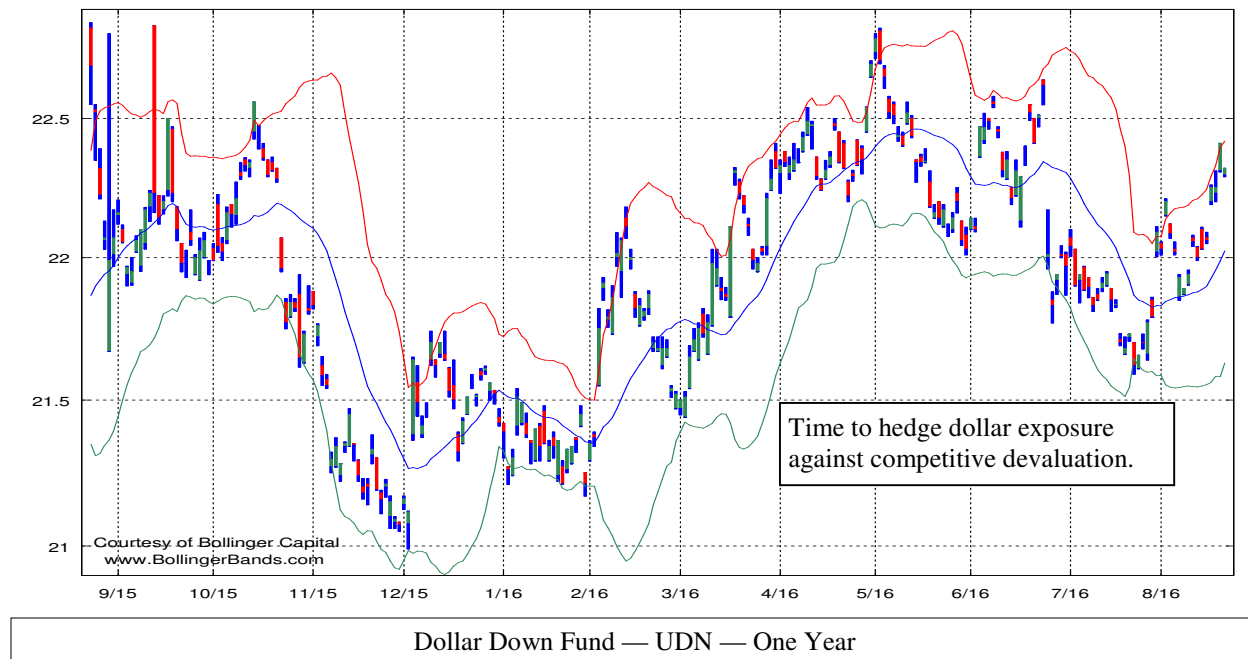
Volatility I

I have spent the best part of my career in the stock market thinking about volatility. As I transitioned from film into finance and started trading options I understood immediately that in order to be successful in that business the first thing you had to do was get a handle on volatility. In those days, and perhaps still today, volatility was poorly understood, so getting a better handle on it than the next guy wasn't too hard. Bollinger Bands arose directly from that work and have remained a constant throughout my professional life.

Recently, after not having traded options for some years, my clearing firm decided to pare away some of my per-

missions. Well, there is nothing like having someone tell you "No, you can't do that." to get you to do it, and here I am trading volatility again; this time not with options, at least not yet, but with ETFs and futures. This seems like pretty open territory to me with lots of opportunity. Some pros may know what is going on, but the crowd seems clueless and weather-vanes with each breeze. This is rarefied territory alright; we are talking futures contracts on the implied volatility derived from mathematical models of options based on an index of 500 common stocks of companies engaged in actual business. If I haven't lost count, that's a fifth derivative. In any case, as I am not a commodity trading advisor or a member of the National Futures Association, I shall not be giving advice in this area beyond this: This seems like a very interesting area which I think has the potential to richly reward those who are willing to ignore conventional wisdom, study hard, do the requisite work, and employ a disciplined approach.

Volatility II

VIX products, that is exchange-traded notes and funds, based on the implied volatility of the S&P 500 index options have become a mania. The open interest in these products is huge, how huge or, more importantly, how to scale that hugeness against the markets no one really knows. All that seems clear is that the open interest in these products seems much larger than the market could handle during a panic. The total assets of VXX, the most popular exchange traded note based on the VIX, are greater than 1.6 billion dollars and, if I have calculated it correctly, the notional value to the open interest of the

Time to hedge dollar exposure against competitive devaluation.

Courtesy of Bollinger Capital
www.BollingerBands.com

Dollar Down Fund — UDN — One Year

GroupPower

Sector Ranks

Name	Momentum			$$
	Short	Inter.	Long	Flow
Technology	0.95	1.51	1.70	80.8
Industry	0.86	1.27	1.48	84.0
Energy	0.84	0.81	0.91	64.8
Consumer Cyclical	0.77	0.93	0.73	71.2
Transportation	0.72	0.85	0.72	44.8
International	0.71	1.08	0.99	78.4
Financial	0.67	0.99	0.95	90.4
Media	0.67	0.92	1.05	56.0
NASDAQ Comp	0.55	1.04	1.07	N/A
Market ETFs	0.34	0.73	0.91	100.0
Business	0.29	0.47	0.56	76.8
S&P 500	0.24	0.60	0.74	N/A
Consumer Noncyclical	-0.05	0.32	0.62	73.6
Basic Materials	-0.11	1.15	1.88	72.0
Yield	-0.35	0.28	0.74	99.2
Healthcare	-0.35	0.32	0.59	75.2
Telecommunications	-0.54	0.18	0.49	92.8

Statistics

Breadth

10-day Open Arms Index	0.93
10-day Open Adv / Dec	1.08
High-Low Index	98.33
High Low Logic Index	0.00

Percent Above Average

Percent above 10-day moving average	93.10
Percent above 50-day moving average	89.16
Percent above 200-day moving average	87.76

New Highs and Lows

13-week new highs	0
13-week new lows	0
26-week new highs	8
26-week new lows	0
52-week new highs	22
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, 22-day horizon.
Int = Intermediate-Term Front-Weighted Momentum, 62-day horizon.
Long = Long-Term Front-Weighted Momentum, 125-day 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
Investment Firms	Software Health
Alcoholic Beverages	Healthcare Providers
Textiles	Telephone
Railroads	
Retail Jewelry	
Clothing and Fabrics	
Retail Apparel	

Strongest — GroupPower Ranking — Weakest

Group Name	Short	Inter	Long	Money Flow	In/Out Gear	Group Name	Short	Inter	Long	Money Flow	In/Out Gear
Gas Producers	4.35	4.83	4.89	38.4	0.67	Fertilizer	-0.05	-0.13	-0.37	51.2	-0.16
Retail Apparel	3.41	2.93	1.89	36.0	0.90	Building Materials	-0.06	0.59	1.09	97.6	0.97
Vehicle Other	2.99	3.46	3.50	69.6	0.78	Gaming Equipment	-0.08	0.85	1.38	84.8	0.79
Retail Jewelry	2.52	1.75	0.55	67.2	0.89	Retail Electronics	-0.09	0.01	-0.72	28.8	0.76
Networking	2.48	2.57	2.33	80.0	0.84	Agricultures	-0.10	-0.21	0.02	58.4	-0.65
Comps Parts	2.36	2.31	1.60	51.2	0.48	Soft Drinks	-0.10	0.02	0.19	79.2	0.75
Energy Royalty Trusts	2.28	2.51	3.01	55.2	0.17	Movies Studios	-0.10	0.48	0.80	88.8	0.81
Brazil	2.24	3.79	4.45	83.2	0.86	REIT Health	-0.10	0.79	1.33	100.0	0.74
Semiconductor Equip	2.18	2.79	2.96	87.2	0.91	Insurance Brokers	-0.12	0.20	0.63	95.2	0.71
Clothing and Fabrics	2.09	1.31	0.81	74.4	0.46	Metals Non Ferrous	-0.13	0.72	1.45	52.0	0.89
Retail Broadline	2.01	2.48	1.43	55.2	0.80	Food General	-0.14	0.43	0.99	88.0	0.70
Agricultural Machine	2.00	1.37	1.22	66.4	0.36	Farm Products	-0.14	0.88	1.38	93.6	0.87
Footwear	1.97	1.77	1.49	56.8	0.75	Retail Autoparts	-0.18	0.37	0.72	98.4	0.77
Machinery Heavy	1.84	2.29	2.51	80.8	0.85	Advertising Marketing	-0.18	0.38	0.57	63.2	0.70
ETF Energy	1.83	1.29	1.09	87.2	-0.26	Airlines	-0.21	0.05	0.13	53.6	0.84
Oil Refining	1.83	0.64	-0.16	62.4	-0.34	Research Services	-0.24	-1.07	-0.95	90.4	-0.77
Sftware Engineer Sci	1.82	1.83	1.80	98.4	0.91	Home Construction	-0.24	0.38	0.65	72.8	0.87
World Oil Companies	1.73	1.76	1.93	87.2	0.57	Food Retailers	-0.27	-0.13	-0.01	48.8	0.29
Employment Services	1.72	1.25	0.52	53.6	0.46	Management Services	-0.29	0.31	0.77	88.0	0.89
China Mainland	1.71	2.01	1.62	55.2	0.88	Property Management	-0.29	0.45	0.36	73.6	0.72
Latin America	1.71	2.28	2.54	81.6	0.87	Travel	-0.30	-0.94	-1.34	38.4	-0.27
Industrial Elec Equip	1.66	2.07	2.15	76.0	0.85	Precious Metals	-0.40	2.00	3.92	87.2	0.74
Communication Tech	1.65	1.80	1.35	70.4	0.68	Oil Drilling	-0.46	-0.69	-0.31	64.8	-0.49
Semiconductor	1.61	2.31	2.44	78.4	0.91	REIT Office	-0.47	0.58	1.30	96.8	0.82
Adv Medical Devices	1.58	2.61	2.81	79.2	0.89	Retail Discount	-0.51	0.35	0.85	93.6	0.86
Railroads	1.55	1.64	1.48	74.4	0.97	Lab Research	-0.56	0.09	0.18	72.8	0.92
Textiles	1.46	1.74	1.51	84.8	0.84	Communication Service	-0.58	0.14	0.38	100.0	0.90
Oil Services	1.33	0.46	-0.03	45.6	-0.23	Wireless Communications	-0.63	1.08	1.76	95.2	0.86
Instruments	1.31	1.94	2.35	100.0	0.91	Medical Distributors	-0.66	-0.25	-0.03	83.2	0.75
Title Surety Insurance	1.28	2.03	1.73	56.0	0.92	REIT Industrial	-0.66	0.07	0.68	94.4	0.77
Mining Diversified	1.26	2.14	2.19	72.0	0.86	Electric Utilities	-0.67	-0.36	0.15	92.8	0.07
Industrial Prod Dist	1.25	1.38	1.41	91.2	0.76	ETF Real Estate	-0.70	0.05	0.50	99.2	0.78
Construction	1.24	1.98	2.30	94.4	0.95	Toys Games	-0.72	0.29	0.81	84.8	0.93
Israel	1.22	1.52	1.37	51.2	0.75	REIT Residential	-0.74	-0.08	0.34	91.2	0.65
Banks Southeast	1.21	1.43	1.37	92.8	0.78	REIT Retail	-0.77	0.20	0.72	96.0	0.77
Educational Services	1.20	1.20	1.26	51.2	0.91	Telecom Infrastructure	-0.79	-0.41	-0.12	87.2	0.50
Switzerland	1.20	1.30	0.82	81.6	0.54	Pollution Waste Mgt	-0.83	-0.58	-0.08	87.2	0.15
Elec Distributors	1.17	1.35	1.41	68.0	0.69	ETF Telecom	-0.86	-0.26	0.13	80.8	0.81
IT Security	1.16	1.52	1.78	68.0	0.83	Drug Delivery System	-0.87	0.84	0.96	36.8	0.87
Automobile Mfg	1.15	1.35	0.92	72.0	0.79	Spec Health Service	-0.87	-0.19	0.37	89.6	0.50
Mexico	1.14	0.94	0.76	73.6	0.66	Solar Energy	-0.99	-1.34	-2.28	9.6	0.37
Auto Parts	1.14	1.42	1.14	63.2	0.66	Food Wholesalers	-1.07	-0.65	-0.07	66.4	0.32
Personal Computers	1.08	1.81	1.73	74.4	0.90	Dry Bulk Shippers	-1.46	-1.66	-2.54	21.6	-0.01
ETF Emerging Markets	1.06	1.75	1.77	76.8	0.94	Water Companies	-1.48	-0.74	0.17	88.8	0.09
Insurance Life	1.05	0.99	0.83	75.2	0.43	Coal	-1.53	1.93	2.34	64.0	0.84
Investment Firms	1.05	1.46	1.31	78.4	0.89	Steel	-1.90	0.44	1.95	73.6	0.88
Japan	1.05	1.43	1.28	97.6	0.87	Telephone	-2.04	-1.36	-0.73	76.0	0.27
Aerospace Defense	1.04	1.16	1.24	89.6	0.80	Retail Office Supplies	-2.12	-2.80	-3.22	48.8	-0.51
Banks Southwest	1.02	1.42	1.52	81.6	0.87	Software Health	-2.33	-1.81	-1.40	87.2	0.30
ETF Technology	1.01	1.56	1.62	84.8	0.95	Healthcare Providers	-2.56	-1.94	-1.24	65.6	0.08
Retail Drug	1.00	0.56	0.25	52.0	-0.32	Hospitals	-3.37	-3.16	-2.74	68.8	-0.33
Industrial Services	0.98	2.74	2.98	85.6	0.95						

Sector Selector ETF Portfolios (Experimental)

Exp. ETF Portfolios	Symbol	Date Selected	Purchase Price	Current Price	Dividends	Return	Rank
Style							(# in 21)
Core Growth	IUSG	8/8/2016	42.84	42.88	0.00	0.09%	7
Russell Mid-Cap Valu	IWS	4/11/2016	70.61	77.12	0.42	9.81%	11
S&P 500 Growth	IVW	8/15/2016	123.08	122.55	0.00	-0.43%	2
International							(# in 24)
Brazil	EWZ	6/24/2016	27.51	34.49	0.00	25.37%	5
Russia	RSX	4/8/2016	16.85	18.67	0.00	10.80%	11
Canada	EWC	5/16/2016	24.53	25.87	0.20	6.28%	10
Sector							(# in 27)
Consumer Goods	IYK	2/26/2016	106.32	117.14	1.30	11.41%	7
Software	PSJ	8/8/2016	45.47	47.33	0.00	4.09%	2
Gold	IAU	6/24/2016	12.77	12.93	0.00	1.25%	8

Portfolio

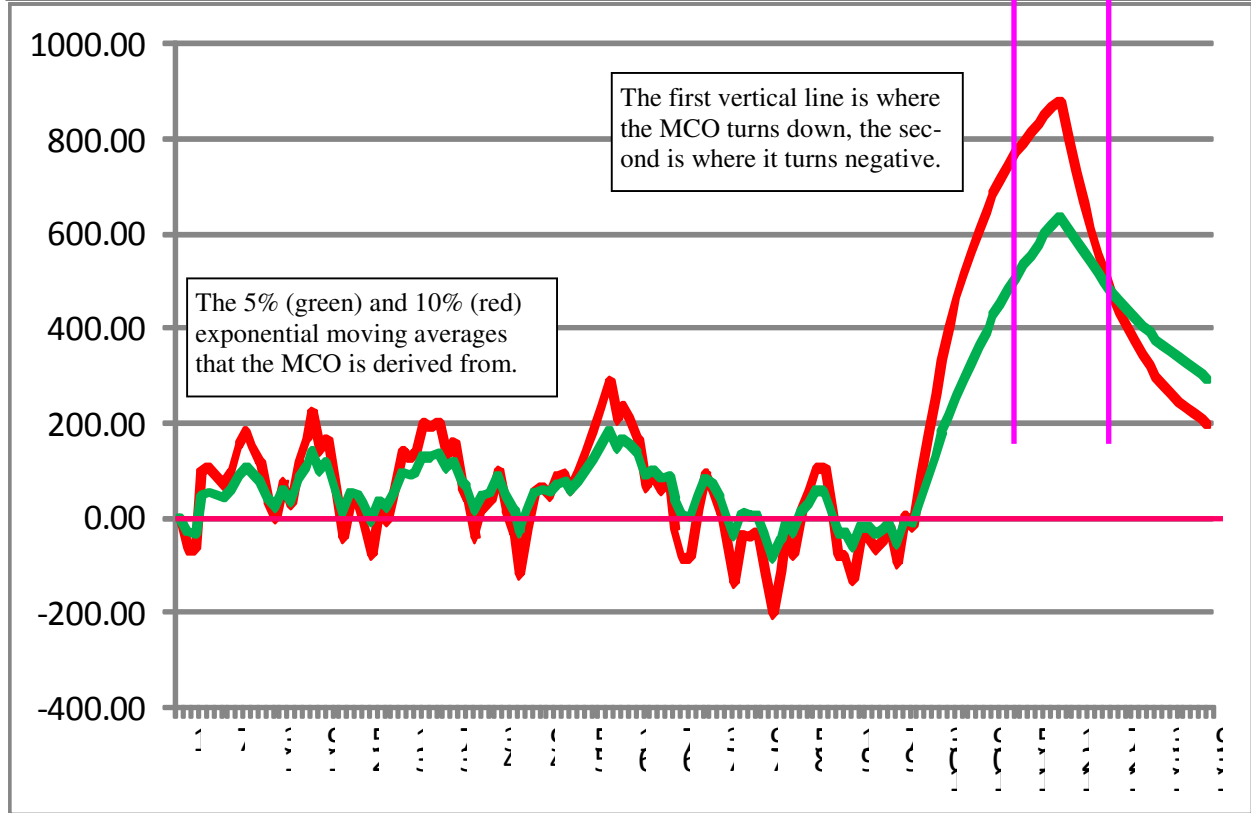| Slot	Name	Symbol	ET Rating Stock	Group Power Group	ET Rating Group	Entry Date	Entry Price	Current Price	Divid.	Total Return	Mental Stop	Action
Core Portfolio – US Equities												
1	S&P 500	SPY	2	Large Cap	1	10/19/15	203.20	218.54	3.34	9.2%	205.00	Hold
2	Russell 2000	IWM	2	Small Cap	1	11/02/15	118.21	122.94	1.44	5.2%	112.00	Hold
3	Russell 1000 Growth	IWF	2	Large Cap	1	11/12/15	98.76	105.07	1.14	7.5%	99.00	Hold
4	S&P 500 Value	IVE	2	Large Cap	1	03/21/16	90.09	96.24	1.08	8.0%	91.00	Hold
5	British Petroleum	BP	3	Oil Major	2	03/21/16	31.43	34.33	0.60	11.2%	32.00	Hold
6	Royal Dutch	RDS-A	2	Oil Major	2	03/21/16	48.91	50.61	1.54	6.6%	47.50	Hold
7	S&P MidCap	MDY	2	MidCap	1	04/18/16	267.64	284.53	0.85	6.6%	266.00	Hold
8	Chevron	CVX	2	Oil Major	2	08/08/16	101.15	102.32	-	1.2%	97.00	Buy
9	Oil Services HOLDRS	OIH	2	Oil Service	2	08/08/16	28.87	29.64	-	2.7%	26.50	Buy
9	Oceaneering	OII	3	Oil Service	2	08/22/16	29.73	29.73	-	0.0%	26.00	Buy
Core Portfolio – International												
1	Japan	EWJ	2	Japan	1	12/14/12	9.45	12.30	0.48	35.3%		Hold
1	World	VEU	2	International ETF	1	10/19/15	45.53	45.54	0.87	1.9%		Hold
Core Portfolio – Dollar Diversification												
1	Dollar Down ETF	UDN	3	Bear Yield	5	07/18/16	22.32	22.32	-	0.0%		Hold
Core Portfolio – Yield												
1	Barclays High Yield	JNK	2	High Yield	2	02/20/09	29.17	36.54	19.56	92.4%		Hold
2	iShares High Yield	HYG	2	High Yield	2	02/20/09	69.98	86.59	38.70	79.0%		Hold
3	PS Finan. Preferred	PGF	3	Yield	2	03/13/09	8.35	19.29	9.07	239.7%		Hold
Core Portfolio – Speculation												
1	VIX Inverse	XIV	1	Bull Market	1	10/06/15	27.29	37.55	-	37.6%		Add

Portfolio Notes: On August 8th we added Chevron, CVX, and the Oil Service HOLDRS, OIH. Today I am adding OII, Oceaneering Intl, an oil service company. You can replace OIH with it or hold them both. The truth is that I prefer individual stocks, but that may not be your preference. More portfolio notes in the letter. The Value Line Plan is in the market with a Friday stop of 473.43. The Value Line Geometric Average stands at 485.55. You can add to XIV on any pullback.

This synthetic series presents a very bearish picture at a time when there is no bearish input from the data.

McClellan Oscillator — Synthetic Data

The first vertical line is where the MCO turns down, the second is where it turns negative.
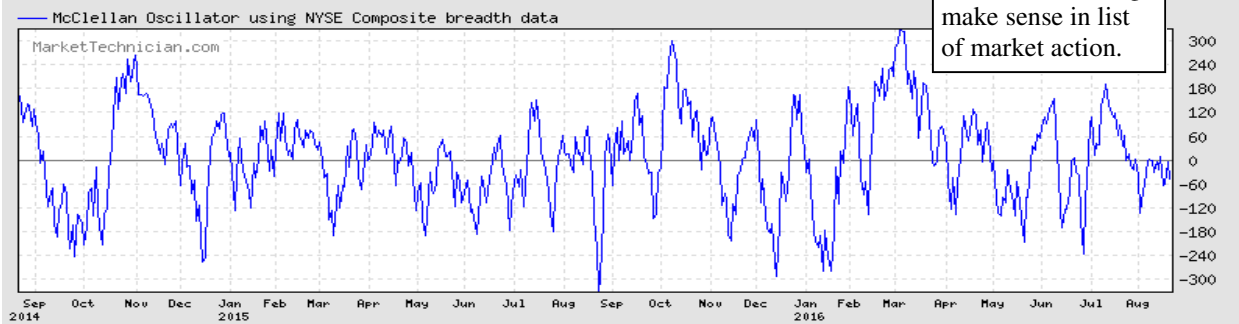
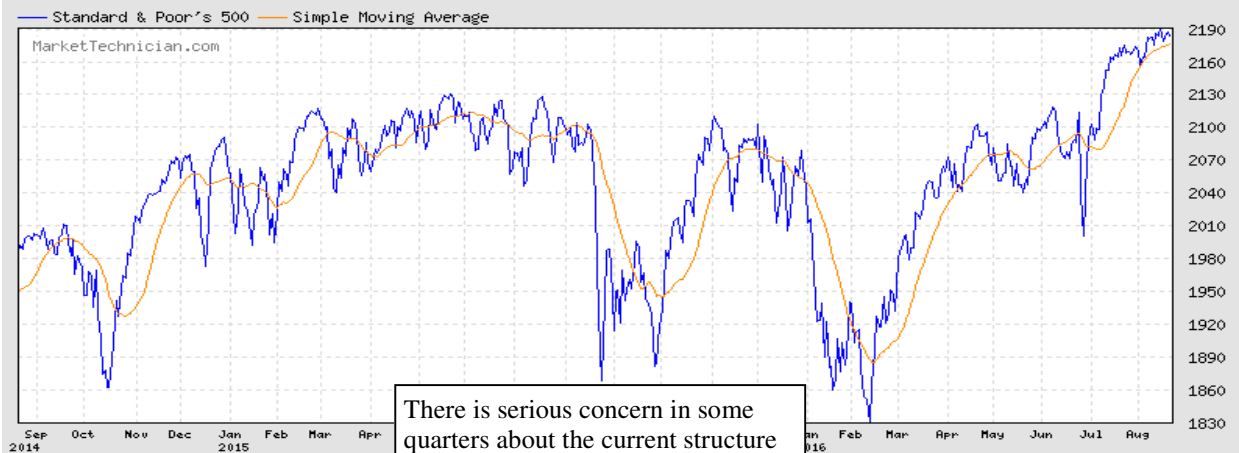The 5% (green) and 10% (red) exponential moving averages that the MCO is derived from.

McClellan Oscillator Components — Synthetic Data
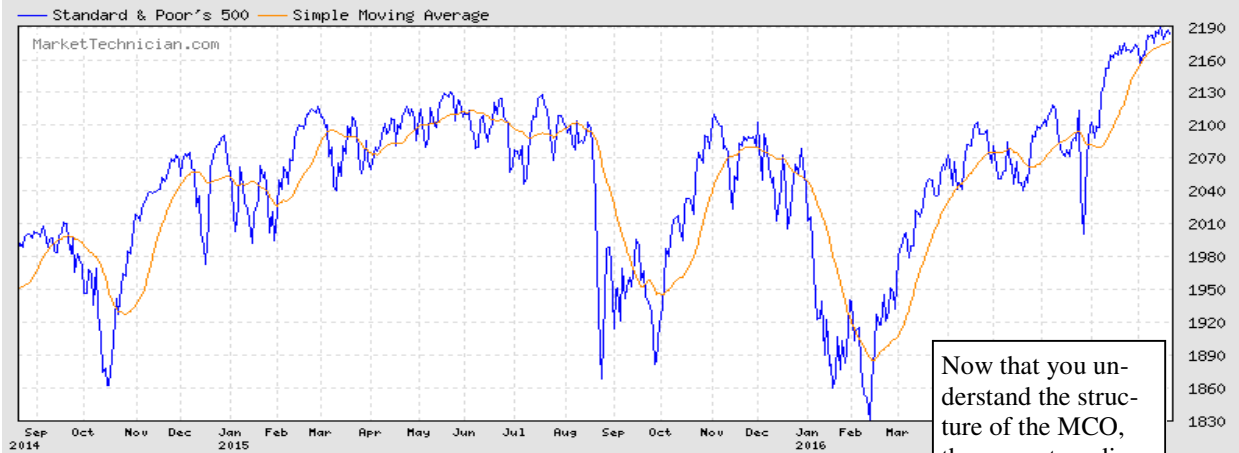
Now that you understand the structure of the MCO, the current readings make sense in list of market action.
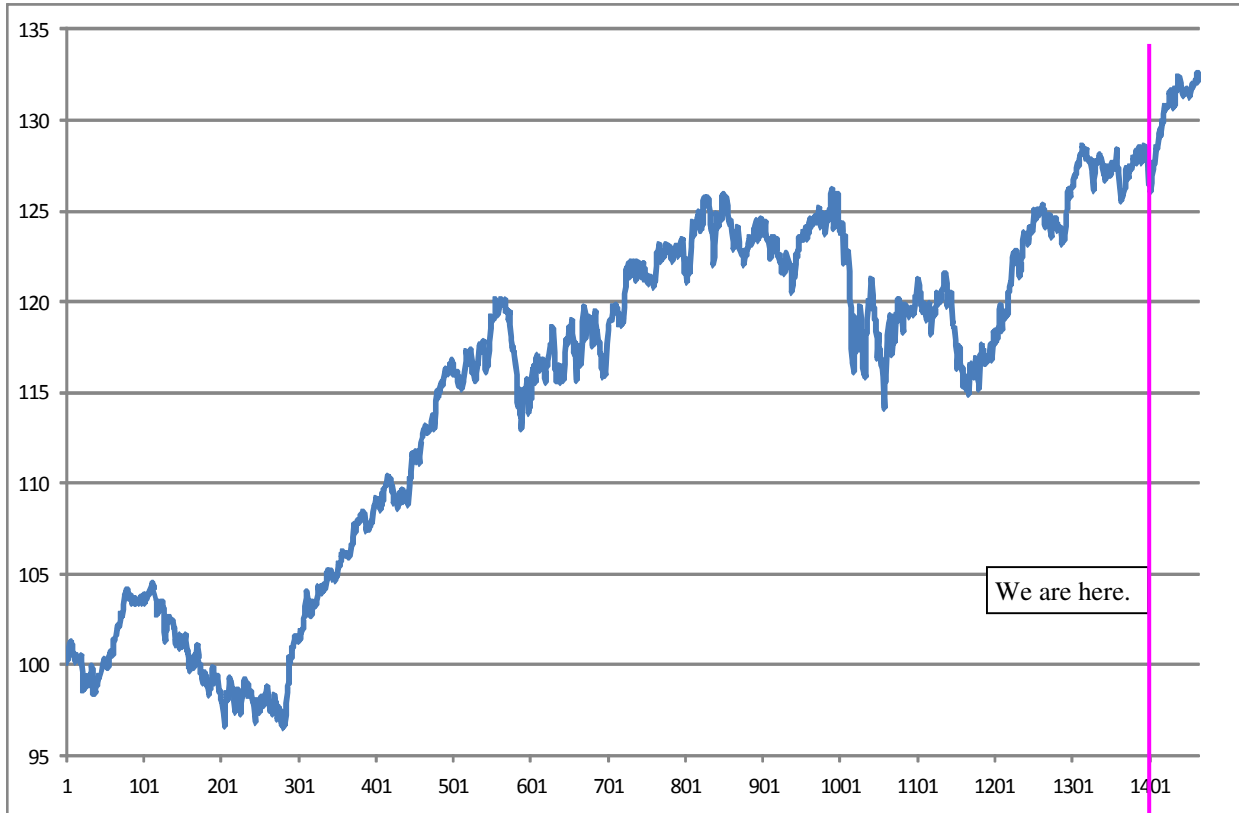
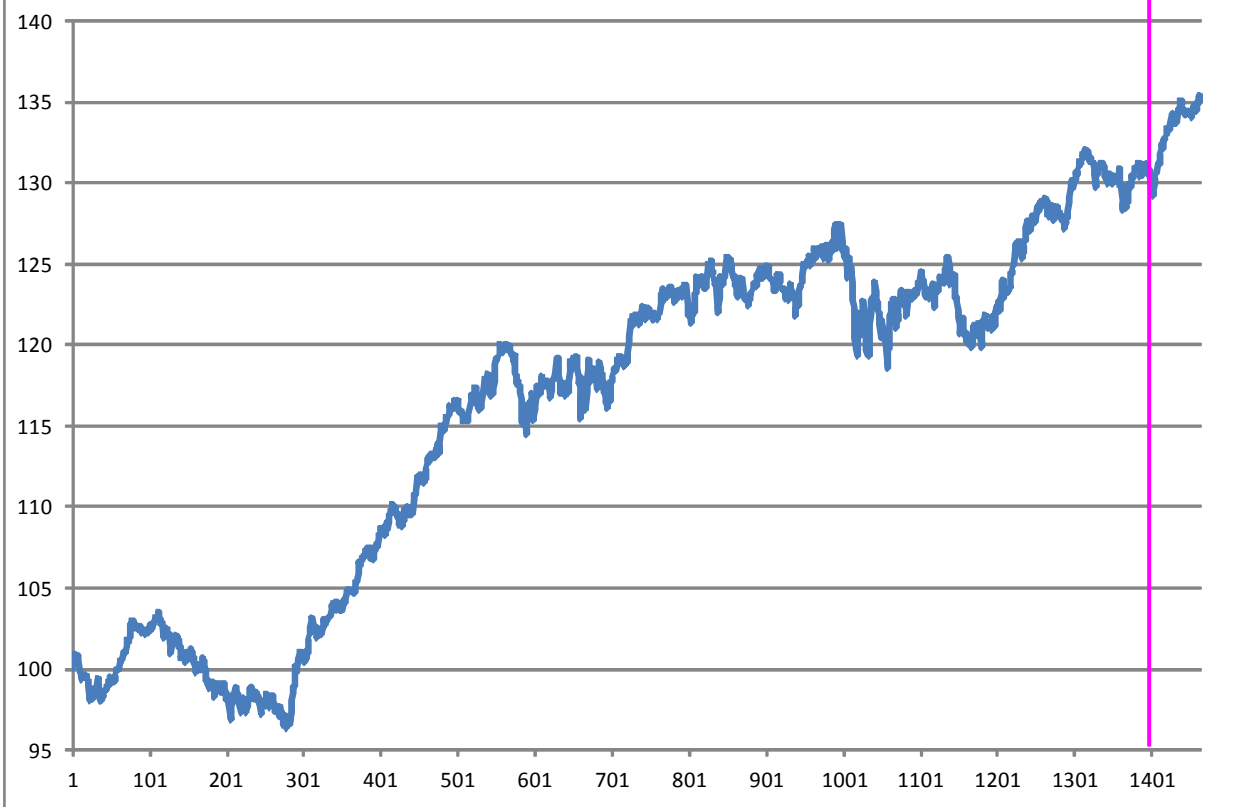McClellan Oscillator — Daily—Two Years

There is serious concern in some quarters about the current structure of the MCS. From my perspective its overall level, near 4,000, is telling a story of a strong market.
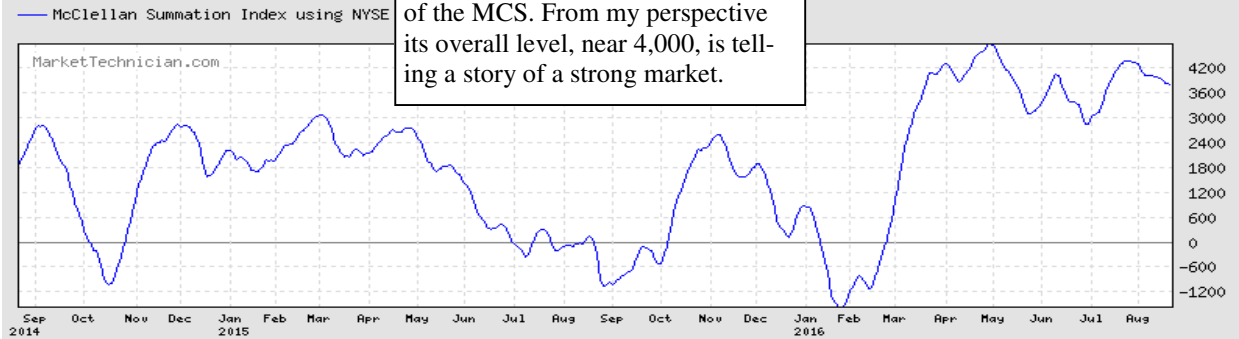
McClellan Summation Index — Daily — Two Years

We are here.

Four-Year Presidential Cycle — 7 Cycles — 1982 through 2010

Four-Year Presidential Cycle — 10 Cycles — 1970 through 2010

VX futures is more than 8.5 billion US dollars. Then there is all the unreported paper, the unlisted swaps and VIX derivatives that the major firms create and trade. This is clearly a bubble and it is rapidly inflating. No one knows when it will reach critical mass, but I am sure of one thing: This is a disaster in the making and it seems almost certain that the VIX and its products will figure heavily in the next market debacle. As Ed Hart would have said, "We shall know in the fullness of time." To which I say, "Forewarned is forearmed."

Volatility III

The popular view is that the current low level of the VIX, the market's fear gauge as some call it, is a forecast for a decline for stocks, but is that true? Or, more precisely, how true is it? While it is true that periods of low volatility have presaged many declines, it is not true that all declines have been presaged by periods of low volatility, or that all periods of low volatility have presaged declines. I have run out of time to complete this study for this issue, so I will take it up next month.

View from the Beach

In the past I advised reading the literature of the opposition, advice that is truer and more important today than ever. However the real issue is that reliable sources are vanishing as personal ethics replace professional ethics.

Something terrible is happening in our media, in our newspapers, on television and on the Internet: objectivity is being lost. Two timely illustrations. First Brexit: The media campaign against Brexit was monumental. Hardly a word ever appeared in print or was spoken on TV in support of Brexit. It was the most one-sided coverage I had ever seen. Every day new articles appeared describing the horrors that a Leave vote would create. Economists and pundits that hadn't seen the light of day in decades were dragged out and dusted off in exchange for pronouncing a pox on Brexit. Polls were written to get the desired response and Armageddon was invoked at every turn. At the time I was amazed and thought that the campaign surely would be successful. How could it

be otherwise? Well, it turned out that a majority of Brits didn't agree with their media. You'd have thought that would have been the end of it, but the campaign continues to this day. Recent example: stories about Germans seeking to entice British banking resources to cross the Channel. Second is of course Donald Trump, who is getting pilloried on the front page of the *New York Times* and *Washington Post* daily, while Hillary Clinton gets little, or good coverage. It seems clear that our writers and editors have abandoned even a pretense of equal, fair, or unbiased coverage in favor of taking a principled stance.

As a young man I worked in television news as a camera person for some years and then in my thirties I worked on the other side of the camera. As a result I am quite familiar with journalistic best practices and ethics. It seems fair to say that in the not too far distant past these massively biased media campaigns simply could not have existed. Yes, biases existed even then, but they were not predominant. There was still a core idea of providing fair, balanced coverage. That is no longer the case. Perhaps the tilting point was the Nixon impeachment campaign. I am not sure when, but a line has been crossed and I don't think we'll go back. Reporters and editors have abandoned journalistic principles and practice in favor of giving voice to their conscience. And that is not a left/right, Republican/Democrat thing, it is systemic. Essentially everything disseminated by the news media today is an op-ed piece. The unfortunate thing is that means there is no longer even the pretense of being arbiters of truth on the part of the media; facts must now be what you perceive them to be after being as careful a consumer of available sources as you have time for. Now and tomorrow if you want balanced coverage you will have to create it.

Appearances

IFTA 2016, (International Federation of Technical Analysis)
October 21-23, 2016
Sydney, Australia
http://conference.ifta.org/2016/