



WAYNE WHALEY MARKET COMMENTARY

WayneWhaley.WitterLester@gmail.com

August 3, 2017

THE 2017 BULLISH TOY STORY

The Toy (Turn Of the Year) Barometer is based upon the S&P's percent change from Nov 19 – Jan 19. The 2017 Toy Barometer reading is 3.75%, closing at 2263.69 on January 19 vs 2181.90 on November 19. A Toy Barometer measurement above 3% is considered a Bullish signal for the next Toy Year (Jan19-Jan19). Since 1950, the S&P is 32-1 in the year following a Bullish Toy Barometer signal for an avg gain of 16.9%. The S&P has been positive either six or twelve months later, following all 33 Bullish Toy signals. In the below table: Qtr1 = Jan19-Apr19, Qtr2 = Apr19-Jul19, Qtr3 = Jul19-Oct19, Qtr4 = Oct19-Jan19. Note that strong Turn of the Years are followed by strong End of the Years, 31-2 in the defined 4th Quarters. Max Drawdowns in this table are worst performance at any time in the following yr measured from Jan 19.

S&P PERFORMANCE AFTER A BULLISH (+3%) TOY BAROMETER SIGNAL							
NOV19-JAN19		S&P PERFORMANCE IN THE FOLLOWING YEAR (JAN19-JAN19)					
YEAR	TOYBRMTR	QTR1%	QTR2%	QTR3%	QTR4%	TOYYR%	MAXDRWDN%
1950	4.26	6.99	-3.82	15.32	6.69	26.62	-1.13
1951	7.55	3.18	-0.91	6.78	3.99	13.53	-1.87
1952	6.69	-3.09	5.74	-2.62	7.48	7.26	-4.78
1954	5.25	8.10	8.00	6.44	9.56	36.14	0.00
1955	4.51	9.32	10.15	-0.07	3.92	25.06	0.00
1958	3.24	3.92	7.16	12.43	8.20	35.47	-1.19
1959	4.66	4.02	2.19	-3.68	0.46	2.86	-3.77
1961	7.08	10.11	-1.69	5.80	0.44	15.02	0.00
1963	8.96	6.21	-1.27	7.27	4.42	17.46	-1.66
1964	6.48	5.21	4.30	1.10	2.00	13.15	-0.20
1967	5.61	7.13	1.86	1.90	-0.20	10.98	-0.01
1971	13.09	10.93	-4.88	-1.95	7.09	10.79	-3.84
1972	13.39	5.12	-2.80	1.80	9.93	14.34	-1.33
1975	4.05	21.62	8.00	-4.66	10.65	38.56	-0.37
1976	9.27	3.17	2.81	-2.72	2.37	5.62	-0.28
1979	5.64	1.53	0.33	-0.01	9.32	11.35	-3.63
1980	6.56	-9.47	21.37	7.77	2.17	20.98	-11.57
1983	6.02	9.25	3.85	1.16	0.19	14.99	-3.65
1985	5.05	5.71	7.74	-4.15	11.44	21.66	0.00
1986	4.91	16.29	-2.48	1.05	12.77	29.22	-2.37
1987	13.33	6.52	9.65	-28.53	10.89	-7.43	-16.86
1988	3.86	3.45	4.09	3.17	3.59	15.08	-2.68
1989	7.67	7.05	9.30	3.40	-2.30	18.21	-0.84
1991	4.04	15.64	0.01	2.16	6.72	26.08	-1.18
1992	10.39	-0.67	-0.10	-0.15	4.86	3.88	-5.82
1997	4.58	-1.27	19.44	3.15	1.84	23.88	-4.96
1999	8.53	3.09	9.16	-10.40	15.43	16.39	-2.78
2004	9.34	-0.35	-3.07	0.21	7.38	3.93	-6.72
2009	5.40	2.89	7.51	16.75	4.77	35.30	-20.42
2010	5.05	4.11	-10.54	8.84	9.95	11.45	-11.10
2011	6.85	2.39	1.07	-8.81	8.65	2.54	-14.25
2012	8.13	4.75	-0.03	4.12	3.68	13.05	-2.77
2013	7.14	4.66	8.80	3.10	5.40	23.74	0.00
2017	3.75						
#UP-DN =		28- 5	22-11	21-12	31- 2	32- 1	
AVG%CHG=		5.38	3.66	1.39	7.18	16.88	
MED%CHG=		4.75	2.81	1.80	7.09	15.02	

FEBRUARY IS A CONTINUATION MONTH FOR THE S&P

With two trading days remaining in January, the S&P is up x.xx% over the November-January Quarter. The S&P has shown a tendency to continue the trailing quarters trend into February.

S&P Performance in February

When the Trailing Quarter is Positive

YEAR	NOV-JAN%	FEB%	YEAR	NOV-JAN%	FEB%
1951	10.91	0.65	1985	8.15	0.86
1952	5.23	-3.65	1986	11.57	7.15
1953	7.59	-1.82	1987	12.34	3.69
1954	6.28	0.27	1988	2.10	4.18
1955	15.63	0.35	1989	6.63	-2.89
1956	3.50	3.47	1991	13.13	6.73
1958	1.56	-2.06	1992	4.16	0.96
1959	8.03	-0.07	1993	4.80	1.05
1961	15.71	2.69	1994	2.94	-3.00
1962	0.32	1.63	1996	9.38	0.69
1963	17.13	-2.89	1997	11.47	0.59
1964	4.09	0.99	1998	7.18	7.04
1965	3.18	-0.15	1999	16.47	-3.23
1966	0.50	-1.79	2000	2.31	-2.01
1967	7.99	0.20	2002	6.64	-2.08
1971	15.17	0.91	2004	7.65	1.22
1972	10.30	2.53	2005	4.52	1.89
1973	3.99	-3.75	2006	6.05	0.05
1975	4.17	5.99	2007	4.38	-2.19
1976	13.27	-1.14	2010	3.64	2.85
1979	7.28	-3.65	2011	8.69	3.20
1980	12.12	-0.44	2012	4.72	4.06
1981	1.63	1.33	2013	6.09	1.11
1983	8.66	1.89	2014	1.48	4.31

#UP-DN= 31-17 AVG%CHG= 0.79 MED%CHG= 0.78

When the Trailing Quarter is Negative

YEAR	NOV-JAN%	FEB%
1957	-1.89	-3.26
1960	-3.32	0.92
1968	-1.14	-3.12
1969	-0.39	-4.74
1970	-12.46	5.27
1974	-10.82	-0.36
1977	-0.85	-2.17
1978	-3.35	-2.48
1982	-1.22	-6.05
1984	-0.09	-3.89
1990	-3.31	0.85
1995	-0.41	3.61
2001	-4.43	-9.23
2003	-3.39	-1.70
2008	-11.03	-3.48
2009	-14.75	-10.99
2016	-1.14	5.49

#UP-DN = 5-13

AVG%CHG= -1.99

MED%CHG= -2.32

WHEN THE S&P SETS AN ALL TIME HIGH IN FEBRUARY

On today, February 9th, 2017, the S&P Cash closed at an all time high of 2307.87. Since 1950, there have been 18 years in which the S&P closed at an all time high in February. For this particular study, allow me to define the Spring Quarter as March–May. In those 18, post 1950 years, in which an all time high was set in February, the S&P was 16-2 in those following Spring Quarters for an average/median quarterly gain of 3.69/3.70%.

THE SPRING S&P QUARTER AFTER A FEBRUARY ALL TIME HIGH				
YEAR	MAR%	APR%	MAY%	MAR-MAY%
1955	-0.5	3.8	-0.1	3.1
1961	2.6	0.4	1.9	4.9
1964	1.5	0.6	1.1	3.3
1965	-1.5	3.4	-0.8	1.1
1966	-2.2	2.1	-5.4	-5.6
1983	3.3	7.5	-1.2	9.7
1985	-0.3	-0.5	5.4	4.6
1986	5.3	-1.4	5.0	9.0
1987	2.6	-1.1	0.6	2.1
1991	2.2	0.0	3.9	6.2
1993	1.9	-2.5	2.3	1.5
1994	-4.6	1.2	1.2	-2.3
1995	2.7	2.8	3.6	9.4
1996	0.8	1.3	2.3	4.5
1997	-4.3	5.8	5.9	7.3
1998	5.0	0.9	-1.9	4.0
2014	0.7	0.6	2.1	3.4
2015	-1.7	0.9	1.0	0.1
#UP-DN =	11-7	14-4	13-5	16-2
AVG%CHG=	0.76	1.43	1.50	3.69
MED%CHG=	1.15	0.88	1.58	3.70

In case you were wondering, I did look at the remainder of the year and did not see anything there worth writing home about.

DOES THE S&P MELTDOWN MORE OFTEN THAN MELTUP ?

The motivation for this study comes from

1. The historically low volatility levels the S&P is experiencing over the last quarter and
2. My interest in trading S&P options and the impact potential volatility outbreaks have on the decisions I make.

I have been trading S&P index options monthly/weekly since 1988 and professionally since 1994. The first year involved a lot of experimentation and learning. I tried buying, selling, spreads, straddles, butterflies and an assortment of insects I struggle to recall. As is the case for most adolescent option traders, it was imposed upon me fairly quickly that when I bought options, I tended to lose money and when I sold options, I tended to post some kind of positive number, especially if I concentrated on the 'Out of the Moneys, away from the current strike price. During the 1988-1990 time frame, of which much of my perspective developed, the 22% Black Monday of October 19, 1987 was still fresh in the memory of participants and was still priced into the 'Out of Money' Puts and I gravitated into a very comfortable zone of selling the 'Out of Money' Puts and, at that time, hedging them with the sell of 'At the Money' Calls in concert with market fluctuations, as deemed necessary. My success at doing this, at the time, was a major factor in my leaving a 12 year career as a software engineer in the defense industry to convert an obsessive hobby into a career.

Due largely to some recent 21st century, premium write, unfriendly events, such as two 50% Bear Markets and a 2010 thirty minute flash crash, many a 21st century asset allocator has understandably sworn off premium selling and the question of whether selling 'well hedged' Premium has a place in a portfolio, is a relevant subject, especially for those of us who are inclined to engage in what many consider frivolous activities.

But back to the question of option premium pricing, the deal is, from most any statistical valuation perspective 'Out of the Money' S&P index Puts are expensive, very expensive, arguably, unjustifiably expensive. For example, if you have not taken a good look lately at the disparity in prices between 'Out of the Money' S&P Call and Put premiums, the day I began taking these notes on February 25, 2017 was a good example, especially given the March SP closed on an even increment of five (2365.0) that day making it easy to do a symmetric comparison of Put and Call Prices.

End of the Month S&P March Calls vs Puts on Feb 25, 2017		
With the March S&P = 2365	End of March Call	End of March Put
At the Money 2365 S&P Calls & Puts	24.30	28.90
50 Points (2.1%) out of the Money	5.50	14.20
100 Points (4.2%) out of the Money	1.05	7.60

The end of month March Call, 100 points out of the money was 1.05 vs 7.60 for the analogous Put, also 100 Points out of the money. If you haven't lived through a Black Monday, a 9/11, a Banking Crisis or a computer algorithm generated flash crash, you would be inclined to almost instantaneously argue the above relationship seems counter intuitive for the pricing of four week options given that over the 50 year period 1967-2016, 60% of calendar months have been S&P positive for an average monthly gain of 0.65%. In my opinion, there are three explanations for this pricing anomaly which, I propose, does not fully justify the enormous discrepancy in S&P Put and Call prices.

The first explanation is that the purchase of 'Out of the Money' Put options are popular by fund managers to hedge large equity portfolios or similarly long biased funds against large unforeseen, downside moves and thus the supply/demand forces trump mathematically justifiable pricing methods. Just as the equation is stacked in the favor of insurance writers, casinos operators and raffle operators, the option writer can afford to occasionally provide sweepstakes winnings to the option buyer in return for the steady income which accompanies a well planned option write strategy, especially if, as is the case of the insurance writer, the risk is spread over different markets, and he, the insurance writer himself, invest in forms of insurance to protect himself, as well, against the occasional draconian style natural disasters, which insurance writers fret about, utilizing what option traders refer to as 'the hedge'.

The second justification for the Call/Put premium discrepancy, which brings us to the title of today's study, is the common perception that equity markets are more prone to meltdowns than meltups. Given this study is motivated by the pricing of 'monthly' S&P options, I again looked at the last fifty years for monthly moves and I suspect surprisingly to most, during that period, there have been eleven calendar months which posted double digit percentage gains compared to only eight months which have posted ten percent losses.

TEN PERCENT CALENDAR MONTH MOVES 1967-2016							
TEN PCT DOWN MONTHS				TEN PCT UP MONTHS			
#	YEAR	MONTH	PCTCH	#	YEAR	MONTH	PCTCH
1	1973	Nov	-11.39	1	1974	Oct	16.30
2	1974	Sep	-11.93	2	1975	Jan	12.28
3	1980	Mar	-10.18	3	1976	Jan	11.83
4	1987	Oct	-21.76	4	1980	Nov	10.24
5	1998	Aug	-14.56	5	1982	Aug	11.60
6	2002	Sep	-11.00	6	1982	Oct	11.04
7	2008	Oct	-16.83	7	1984	Aug	10.63
8	2009	Feb	-10.99	8	1987	Jan	13.18
				9	1991	Dec	11.16
				10	2011	Oct	10.77

The third possible explanation for why Puts are 'currently' so expensive stems from the fact that three of those noted eight 10% down months of the last half century occurred in the 21st century vs only one ten percent up month this last half century. In fact, going all the way back to 1950, there have been three 50% Bear Markets and two of them occurred in the first decade of the 21st century, which was followed up by the 30 minute flash crash in May of 2010. This may be a partial explanation for the large discrepancy between 'Out of the Money' Puts and Calls, but as I mentioned, I have been trading options since 1988 and although maybe not to the same extent as recently, 'Out of the Money' Puts have always sold at a multiple to the similar Call on the opposite side, even during the 90s, a decade in which the S&P tripled in somewhat straight up fashion. Worthy of note as well, we had a 46 month period between Sept 2011-July 2015, which was absent a 10% correction. Before leaving the monthly volatility analysis, for your information, there were 79 five% up months vs 57 five% down months.

Ok, Wayne on a monthly basis, what about the intra month or daily Meltdowns, resulting from unforeseen circumstances, such as Chernobyls, Tsunami's, Assassinations, Iraqs invading Kuwaits, Planes flying into buildings, and potential events ahead of us, such as North Korea's launching Ballistic Missiles at land rather than oceans, Hoover Dam's exploding, etc.. In the past 50 years, ninety nine percent of days experienced an S&P move of less than 3.5% from (1967-2016). Let's identify a One Day Meltdown/Up as those three standard deviation cases outside that range. A 3.5% day today, would be an 80 point S&P move and I think fair to say, considered a meltdown/up. I found it incredibly interesting, that over those last 50 years, there were sixty six +3.5% days vs only fifty four 3.5% down Days.

THE SIXTY SIX 3.5% UP S&P DAYS 1967-2016

#	DATE	%	#	DATE	%	#	DATE	%	#	DATE	%	#	DATE	%	#	DATE	%	CHG
1	19700527	5.02	12	19871021	9.10	23	20001205	3.87	34	20021011	3.91	45	20081020	4.77	56	20090121	4.35	
2	19740712	4.08	13	19871029	4.93	24	20010103	5.01	35	20021015	4.73	46	20081028	10.79	57	20090224	4.01	
3	19741007	4.19	14	19880104	3.59	25	20010405	4.37	36	20030317	3.54	47	20081104	4.08	58	20090310	6.37	
4	19741009	4.60	15	19910117	3.73	26	20010418	3.92	37	20080311	3.71	48	20081113	6.92	59	20090312	4.07	
5	19741029	3.91	16	19971028	5.12	27	20010924	3.90	38	20080318	4.24	49	20081121	6.32	60	20090323	7.08	
6	19781101	3.97	17	19980901	3.83	28	20020508	3.75	39	20080401	3.59	50	20081124	6.47	61	20090409	3.81	
7	19800422	3.64	18	19980908	5.09	29	20020705	3.67	40	20080918	4.33	51	20081126	3.53	62	20100510	4.40	
8	19820817	4.71	19	19980923	3.52	30	20020724	5.73	41	20080919	4.03	52	20081202	3.99	63	20110809	4.74	
9	19820820	3.54	20	19981015	4.17	31	20020729	5.41	42	20080930	5.27	53	20081205	3.73	64	20110811	4.63	
10	19821103	3.91	21	19991028	3.53	32	20020814	4.00	43	20081018	11.58	54	20081208	3.76	65	20111130	4.33	
11	19871020	5.33	22	20000316	4.76	33	20021001	4.00	44	20081016	4.24	55	20081216	5.14	66	20150826	3.91	

THE FIFTY FOUR 3.5% DOWN S&P DAYS 1967-2016

#	DATE	%	#	DATE	%	#	DATE	%	#	DATE	%	#	DATE	%	#	DATE	%	CHG
1	19741118	-3.67	10	19880108	-6.77	19	20000414	-5.78	28	20081002	-4.03	37	20081114	-4.18	46	20090420	-4.83	
2	19821025	-3.97	11	19880414	-4.36	20	20010312	-4.32	29	20081006	-3.85	38	20081119	-6.12	47	20100520	-3.90	
3	19860911	-4.81	12	19891013	-6.12	21	20010917	-4.92	30	20081007	-5.74	39	20081120	-6.71	48	20110804	-4.78	
4	19871016	-5.16	13	19911115	-3.66	22	20020719	-3.84	31	20081009	-7.62	40	20081201	-8.93	49	20110808	-6.66	
5	19871019	-20.47	14	19971027	-6.87	23	20020903	-4.15	32	20081015	-9.03	41	20090120	-5.28	50	20110810	-4.42	
6	19871022	-3.92	15	19980804	-3.62	24	20030324	-3.53	33	20081022	-6.10	42	20090210	-4.91	51	20110818	-4.46	
7	19871026	-8.28	16	19980827	-3.84	25	20080915	-4.71	34	20081105	-5.27	43	20090217	-4.56	52	20111109	-3.67	
8	19871130	-4.18	17	19980831	-6.79	26	20080917	-4.71	35	20081106	-5.03	44	20090302	-4.66	53	20150824	-3.94	
9	19871203	-3.53	18	20000104	-3.83	27	20080929	-8.81	36	20081112	-5.19	45	20090305	-4.25	54	20160624	-3.59	

And interesting, you could probably win a lot of bets on the below statistic, there have been 43 Meltup (+3.5%) days in the 21st century vs only 35 Meltdown (-3.5%) days. If a year is not listed, it did not incur one. And in case there was any debate as to whether 2008 is the most volatile year since the 1930s, check it out.

NUMBER OF 3.5% DAILY MOVES BY YEAR (1967-2016)								
YEAR	+3.5%	-3.5%	YEAR	+3.5%	-3.5%	YEAR	+3.5%	-3.5%
1970	1	0	1989	0	1	2003	1	1
1974	4	1	1991	1	1	2008	19	16
1978	1	0	1997	1	1	2009	6	6
1980	1	0	1998	4	3	2010	1	1
1982	3	1	1999	1	0	2011	3	5
1986	0	1	2000	2	2	2015	1	1
1987	3	6	2001	4	2	2016	0	1
1988	1	2	2002	8	2			

In summary, in the last 50 years, there have been just as many volatile days and months to the upside as there have to the downside, and I find this fact to be supportive of my thesis that S&P 'Out of Money' Puts are on balance, overpriced. I do want to state, it is my opinion, most of the MeltUps originated from conditions which were more anticipated than are meltdowns, such as the favorable resolutions to conflicts and geopolitical turmoil, and often the MeltUps come on the backside of Meltdowns. It is my perception that unanticipated Meltdowns occur much more often than 'unanticipated' Meltups. People and countries don't get unassassinated and the market doesn't Meltup because a plan to blow important building, which no one had prior knowledge of, never happened. Granted there is some justification for using Puts to protect against such unanticipated events, but simply my opinion, Puts are statistically overpriced, maybe not in the first decade of this century, but over a lifetime. And be careful about selling those 'Out of Money' S&P Calls, as a practice. You could probably, as often as not, make a case for buying them.

THE TURN OF THE YEAR TRIFECTA

In 2017, we have began the year, with three Bullish Turn of the Year setups, which each in their own right are extremely positive for the next year, specifically, in chronological order:

- 1) A Bullish (3.75%) Toy Barometer Signal which is based on the percent change in the S&P from Nov19-Jan19. (See Addendum 1)
- 2) An All Time High in February (See Addendum 2)
- 3) A DecJanFeb Barometer signal which occurs when each of those three months are positive

Below are the 13 cases, since 1950, when all three of those setups lined up in the same year. The S&P was positive one year later in all thirteen cases for an average/median gain of 17.43/18.01%. Ten of the following 13 years were up double digits and six of the thirteen were up at least 20%. The most important message I take from the results is based on history, one would be well advised to not get to cute here and attempt to show off your market timing skills as the subsequent spring quarter (Mar-May) has been positive in 12 of those 13 cases for an average/median return of 5.23/4.62%.

THE S&P IN THE YEAR AFTER A TURN OF THE YEAR TRIFECTA

YEAR	DEC%	JAN%	FEB%	TOY%	MAR%	APR%	MAY%	JUN%	JUL%	AUG%	SEP%	OCT%	NOV%	DEC%	JAN%	FEB%	YEAR%
1950	4.36	2.34	1.00	4.26	0.41	3.88	4.57	-5.80	0.85	3.25	5.59	0.41	-0.10	4.72	6.02	0.65	26.60
1951	4.72	6.02	0.65	7.55	-1.47	4.42	-4.06	-2.60	6.87	3.93	-0.09	-1.38	-0.26	3.89	1.56	-3.65	6.70
1955	5.08	1.81	0.35	4.51	-0.49	3.77	-0.13	8.23	6.07	-0.78	1.13	-3.05	7.49	-0.07	-3.65	3.47	23.34
1961	4.63	6.32	2.69	7.08	2.55	0.38	1.91	-2.88	3.28	1.96	-1.97	2.83	3.93	0.32	-3.79	1.63	10.28
1964	2.44	2.69	0.99	6.48	1.52	0.61	1.15	1.64	1.82	-1.62	2.87	0.81	-0.52	0.39	3.32	-0.15	12.38
1983	1.52	3.31	1.89	6.02	3.32	7.50	-1.24	3.52	-3.30	1.13	1.02	-1.52	1.74	-0.88	-0.92	-3.89	6.09
1985	2.24	7.41	0.86	5.05	-0.29	-0.46	5.41	1.21	-0.48	-1.20	-3.47	4.25	6.51	4.51	0.24	7.15	25.25
1986	4.51	0.24	7.15	4.91	5.28	-1.41	5.02	1.41	-5.87	7.12	-8.54	5.47	2.15	-2.83	13.18	3.69	25.24
1991	2.48	4.15	6.73	4.04	2.22	0.03	3.86	-4.79	4.49	1.96	-1.91	1.19	-4.39	11.16	-1.99	0.96	12.43
1993	1.01	0.70	1.05	2.72	1.87	-2.54	2.28	0.07	-0.53	3.44	-1.00	1.94	-1.29	1.01	3.25	-3.00	5.36
1995	1.23	2.43	3.61	1.19	2.73	2.80	3.63	2.13	3.18	-0.03	4.01	-0.50	4.10	1.74	3.26	0.69	31.40
1996	1.74	3.26	0.69	1.96	0.79	1.34	2.29	0.23	-4.57	1.88	5.42	2.61	7.34	-2.15	6.13	0.59	23.48
1998	1.57	1.02	7.04	1.79	4.99	0.92	-1.89	3.94	-1.16	-14.56	6.22	8.03	5.91	5.64	4.10	-3.23	18.01
2017	1.82	1.79	3.89	3.75													
	#UP-DN =	10-3	10-3	9- 4	9- 4	7- 6	8- 5	7- 6	9- 4	8- 5	9- 4	8- 5	9- 4	9- 4	8- 5		13-0
	AVG%CHG=	1.80	1.63	1.75	0.49	0.82	0.50	0.71	1.62	2.51	2.11	2.36	0.38				17.43
	MED%CHG=	1.87	0.92	2.28	1.21	0.85	1.88	1.02	1.19	2.15	1.01	3.25	0.65				18.01

THE PROSPECT FOR EQUITIES IN A 'RATES RISING FROM ZERO' ENVIRONMENT

Unless the February employment number, to be released on Friday, March 10th, blindsides expectations, it is highly anticipated that the Federal Reserve will raise the target for the Fed Funds rate (the rate banks charge each other in overnight lending) to 0.75-1% at their March 15th FOMC meeting, the third rate hike since the initial hike of this rate cycle in December of 2015. Trading in Fed Fund rate futures suggest, if the rate hike doesn't occur in March, the expectation is it will occur at the following FOMC meeting in early May.

Contrary to popular perception, you don't necessarily have to run out and refinance your mortgage or sell your bond fund as the thirty year bond rate is currently 3.05% about where it resided in December of 2015 when the Fed Funds Rate rising cycle began. Bonds Yields are not determined by the big guy, but are driven by market forces relative to inflation expectations. Bond Ylds historically average 1% above day rates, but has on occasion inverted, a story for another day, or I should say, another decade. It is not out of the realm of possibility that short rates could rise a bit more before long rates make a decidedly pointed effort to join in.

The general rule of thumb in equity investing is that it is not considered frugal to 'Fight the Fed', and there is a lot to be said for that thesis. Naturally, one has to respect the idea that higher rates provide more competition for equities in the traditional equity/bond portfolio, and vice versa when rates are low. I have spent a great deal of time trying to develop 'equity exposure vs interest rate direction' models and I learned several lessons in the process. Primarily that a 'Rates High and Rising' environment is traditionally very equity unfriendly (fall of 1987). However, rates 'Low and Rising' aren't as reliably equity unfriendly, and one can even make a strong case that rates 'Low and Rising' are initially actually very good for equities. My studies suggest that the correlation between the direction of rates and equities flips at some point, contingent on the level of rates.

Famed technician Edson Gould came up with the axiom many a decade ago, of 'Three Steps and a Stumble', which is widely quoted by technicians and suggest you should sell equities after three straight rate hikes. This important to note, the reason it wasn't 'One or Two' Steps and a Stumble, is because not only is the first rate hike not usually Bearish for equities, it's actually normally Bullish, as customarily you are coming from a low interest rate environment, whose yields do not provide much competition for equities and the economy is now coming out of a recessionary environment in which there is enough perceived growth to warrant raising rates. And if the economy is starting to grow, so shall company earnings, which should more than offset the enhanced attractiveness, interest bearing securities provide to equities after the first couple of initial rate hikes.

If rates are going from 5% to 6%, one could make the case, there is enough guaranteed return to warrant taking some equity exposure off the table, but if rates are going from 0 to 1%, it is more difficult to sell growing earnings for a guaranteed return of only 1%. My research led me to believe that Gould's axiom should be a little more dynamic, something in the lines of 'If rates are very high (>7%) one step and stumble, if rates are high (5-7%) two steps and a stumble, if rates are moderate (3-5%) three steps and a stumble, if rates are low (1-3%) four steps and a stumble, and if rates are less than 1% and moving higher, 'grab on and hold tight'.

Much of the problem, quantitative analyst have with coming up with simple interest rate axioms which apply today is that we are coming from an unprecedented zero rate interest rate environment and many of the trading rules developed over the last 50 years were developed across the inflationary databases of the 20th century. I have Tbill data going back to 1950 and the only time period in the last 67 years which remotely looks monetarily anything like today, is the 1950s, a decade, in which rates rose from 1.07% to 4.40%. You will see below, that during that decade, the S&P rose 250%. In fact, the only two down years for equities during the 1950s were 1953 and 1957, years in which rates actually dropped.

THE S&P AND TBILL RATEs - 1950s		
End of	TBILL%	S&P500
1949	1.07	16.76
1950	1.34	20.43
1951	1.59	23.77
1952	1.97	26.57
1953	1.20	24.81
1954	1.02	35.98
1955	2.50	45.48
1956	3.22	46.67
1957	2.75	39.99
1958	2.68	55.21
1959	4.40	59.89

When I put out the first version of this study two years ago, I summarized my comments by noting that my instincts were the first couple of rate hikes will be met with initial shortterm, knee jerk selloffs in equities, which should reverse and over the intermediate term, work higher. So far, that is playing out well. The Equity Bears, and anyone who I tend to irritate, will point out that the 1950's rally was possibly an aberration resulting from a decade of pentup equity buying supply resulting from the decade long second World Was.

I have attempted to put together an interest rate model for equities which will work over any interest rate regime. As I alluded, the problem is that the 'Equities to Interest Rate Direction' relationship is dynamic depending on the level of rates and most of the models end up being too complicated to be of practical use to most of us, and I always tended to fall back to pattern recognition techniques. But I did enough work on the subject to have a good idea where that research was headed and if you forced me to post a simple axiom on the subject today, a very simple rule that would be easy to remember would be something akin to a 'Rule of Five' and goes something like this, *'When the five year bond yield is trending toward five percent, you want to be overweight' equities and when the five year rate is trending away from 5 percent, you should be underweighted equities.* I need to make a bit of room on my plate for completing that research before one of you, choose to do so. The current Five Year Bond Yield rate is 2.07%.

My inclination is that current market momentum, in conjunction with a lovely Turn of the Year, tends to support the thesis that one should not let rising rates from the current low levels, flush them out of participation in the 'Equity Over Weighted' contingency: At least not in early spring. Stay tuned.

'SELL IN MAY' VS 'BUY HALLOWEEN'

My Personal 'Sell in May and Go Away' time period is May 5 – Oct 27.

I refer to the complimentary Oct27-May 5 period as 'Buy Halloween and Hold Til Spring', or 'Buy in Fall' for short.

Since 1950, 98% of the S&P's avg annual 8.66% return has been accrued during the 27 week 'Buy Halloween' period.

'Buy Halloween' is 54-13 for an average/median gain of 8.46/8.63%.

'Sell in May' is 42-25 for an average/median gain of 0.20/0.87%

'BUY HALLOWEEN AND HOLD TIL SPRING' VS 'SELL IN MAY AND GO AWAY'

BUY YEAR	SELL HLLWN	BUY INMAY	BUY YR HLLWN	SELL INMAY	BUY YR HLLWN	SELL INMAY	BUY YR HLLWN	SELL INMAY	BUY YR HLLWN	SELL INMAY	BUY YR HLLWN	SELL INMAY	BUY YR HLLWN	SELL INMAY	BUY YR HLLWN	SELL INMAY		
1950	12.82	8.51	60	-4.46	-2.26	70	-19.77	5.75	80	5.78	20.21	90	0.99	-9.95	00	10.48	-3.70	
1951	15.17	0.18	61	24.06	2.74	71	24.86	-9.63	81	1.91	-8.46	91	24.97	0.89	01	-8.19	-12.79	
1952	3.73	1.82	62	-3.07	-17.66	72	13.69	3.74	82	-1.36	14.97	92	8.50	0.40	02	-2.85	-16.35	
1953	3.90	-3.08	63	28.40	5.68	73	0.34	0.34	83	21.42	0.35	93	6.22	4.52	03	3.22	11.29	
1954	16.61	13.18	64	9.28	5.09	74	-18.04	-23.19	84	-3.48	3.88	94	-2.85	3.21	04	8.77	0.35	
1955	18.11	11.95	65	5.54	3.12	75	28.47	-0.39	85	8.95	4.13	95	11.65	11.46	05	4.20	0.53	
1956	14.57	-4.62	66	-4.95	-8.76	76	12.43	0.87	86	26.78	0.44	96	10.68	9.24	06	12.46	3.89	
1957	0.15	-12.41	67	17.71	0.55	77	-1.62	-7.76	87	23.69	-21.04	97	18.46	5.62	07	9.31	1.97	
1958	7.88	15.14	68	3.90	5.62	78	4.54	-2.01	88	10.98	7.14	98	27.21	-4.51	08	-8.32	-39.69	
1959	14.54	-0.57	69	0.16	-6.13	79	6.45	-0.12	89	10.94	8.92	99	26.47	-3.76	09	6.46	17.66	
UP-DN	=10-00	06-04		07-03	06-04		07-03	04-06		08-02	08-02		09-01	07-03		07-03	06-04	
AVG%	=10.75	03.01		07.66	-1.20		05.13	-3.24		10.56	03.05		13.23	01.71		03.55	-3.68	
MED%	=13.68	01.00		04.72	1.64		05.49	-0.25		09.94	04.01		11.17	02.05		05.33	0.44	
																	08.31	02.39
																	08.37	03.13

The superior of the two periods in each year is noted in color above

My defined BuyHalloween period outperformed the same year's SellInMay time frame in 55 of the 67, post 1950 years tested, with one tie in 1973 and in each of the seven decades tested, exemplifying consistency.

In 28 of those 67, post 1950 years, the BuyHalloween period posted a double digit return, while only eight of the SellInMay time frames posted a 10% return.

Therefore, the odds of missing a double digit move by being somewhat cash laden during the SellInMay time frame is relatively small, occurring in only 12% of past 66 SellInMay periods.

SellInMay outperformed BuyHalloween in 2016. Since 1950, SellInMay has never outperformed the corresponding year's BuyHalloween in two consecutive years.

Visually perusing, those double digit SellInMays, you will notice many of those eight double digit returns (1958, 1982, 2003 and 2009) occurred on the backend of deeply oversold conditions after extended Bear Markets, which is much different than the current 2017 environment.

THE FIRST 1.5% DOWN DAY IN OVER A QUARTER

A 1.5% down S&P day is the equivalent of two a Standard deviation move and over the course of the last thirty years happens quiet frequently, 16.5 times on average a year. Last Wednesday, May 17, the S&P was down 1.82%, the first two standard deviation down day of 2017. Over the last thirty years, the first 1.5% down day in over a quarter has generally been a good short term buying opportunity, 20-4 over the next month for an average/median monthly gain of 2.46/2.27%.

S&P PERFORMANCE AFTER THE FIRST 1.5% DOWN DAY IN A QUARTER				
DATE	PERCENT CHANGE	FORWARD S&P PERFORMANCE		
		WEEK%	MONTH%	QTR%
19870901	-1.94	-2.93	1.22	-28.26
19881111	-2.11	-0.54	3.13	9.19
19890222	-1.71	-1.31	-0.66	9.42
19890629	-1.88	1.64	8.26	9.05
19900618	-1.66	-1.28	2.06	-10.96
19910510	-1.96	-0.89	1.41	3.03
19920407	-1.86	3.60	4.47	3.07
19930216	-2.40	0.21	3.32	1.49
19940204	-2.27	0.08	-0.84	-5.85
19951218	-1.55	1.23	0.24	7.40
19961212	-1.54	2.26	5.42	8.76
19980427	-1.93	3.27	0.52	5.59
20040310	-1.78	0.31	1.70	0.98
20040805	-1.63	-1.62	3.05	5.78
20050415	-1.67	0.83	2.02	7.47
20051020	-1.50	0.09	5.98	7.30
20060517	-1.68	-0.92	-1.48	1.98
20070227	-3.47	-0.26	1.30	8.51
20121019	-1.66	-1.48	-2.94	4.30
20130225	-1.83	2.51	5.10	10.87
20140124	-2.09	-0.43	3.06	4.08
20140731	-2.00	-1.09	3.77	2.67
20150629	-2.09	1.15	2.48	-8.55
20160624	-3.59	3.22	6.47	6.25
20170517	-1.82	?	?	?
	#UP-DN =	13-11	20- 4	20- 4
	AVG%CHG=	0.32	2.46	2.65
	MED%CHG=	0.09	2.27	4.95

THE LOWEST CLOSING DAILY VIX SINCE 1985 SET THIS MONTH

Given the subject matter on the previous page, this shouldn't be a shock, but we are experiencing extremely rare single digit VIX readings. This is not incredibly useful market timing information, but is an interesting discussion piece, especially for anyone who engages in the trading of S&P index options.

The price of an option is a function of four variables

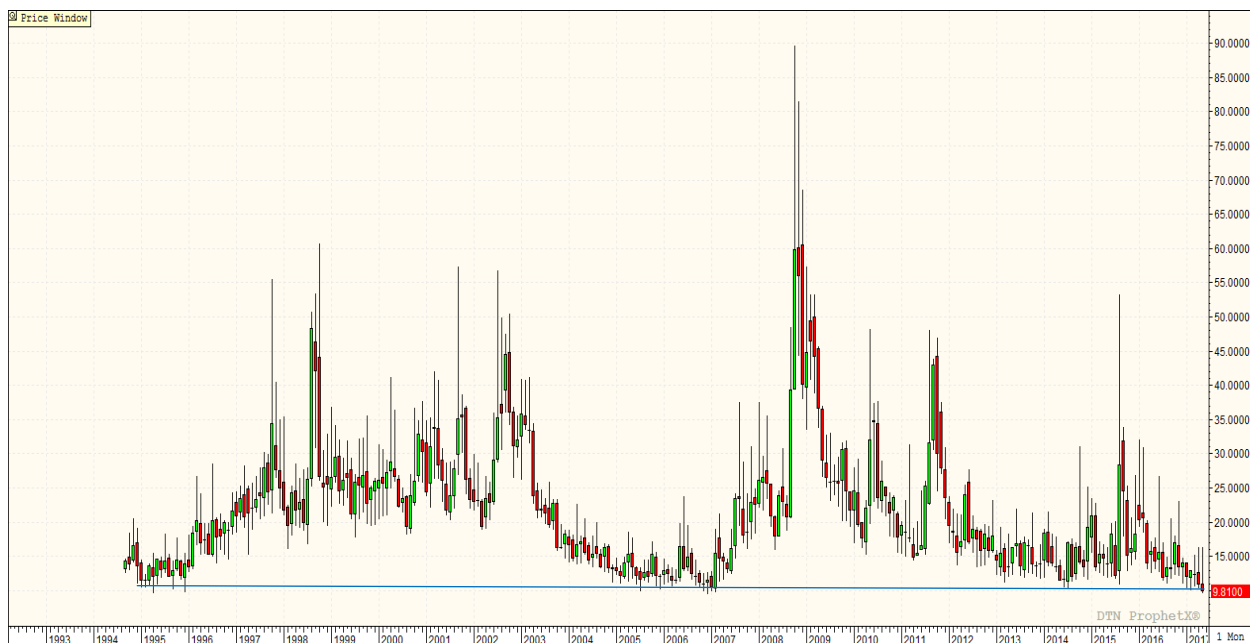
1. The distance the option strike price is from the current price.
2. The amount of time until the option expires
3. The expected volatility (VIX) to be experienced between now and the expiration of the option.
4. A risk free interest rate.

The CBOE's Volatility Index, known by its ticker symbol VIX, is a popular measure of the implied volatility of S&P 500 index option, calculated and published by the Chicago Board Options Exchange (CBOE). It is often referred to as the uncertainly index, the fear index or the fear guage. You can trade VIX futures.

I didn't take the time to download the data and run the numbers, but my 30 yrs of trading S&P index options, suggest to me that Vix normally trades between 12-30 some 90% of the time and, will go to 50 in panic situations and as low as 10 during 'watching paint dry' markets.

On Friday, May 26, VIX closed at 9.81. I have visual access to daily VIX data back through mid 1994. Perusing that data, the lowest closing VIX I see is 9.77 set two weeks ago on May 8. The previous low was 9.89 on Jan 24, 2007. There is a chart of VIX on the VIX wikipedia page which would support the observation that this is also the lowest VIX dating back to at least 1985.

VIX FROM SEPTEMBER 1994-2017.



THE ONE MONTH TAPE EVALUATION – MULTI MARKETS

1. Recall I have a model which forecast the anticipated price movement for any market based upon the price action of the trailing month (21 trading days). In that model, which I call 'Next Month Based on Last Month', we take 42 different measures of price action over the last 21 trading days, go back through the last 30 years, identify the 30 best matches to the current trailing month and quantify the forward results in those 30 matches, which is my version of price pattern recognition. A rating from 40-60 (50=neutral) is then calculated, based on those 30 measures, taking into consideration the closeness of each of the 30 best matches to the current price trend. This should pick up overbought, oversold and thrust conditions. An example is given on the next page.
2. The recent modification comes from my observation that if you are interested in the forward monthly forecast, you should also be interested in what the forecast have been over the last couple of weeks, not just the last observation.
3. I now calculate a moving average rating which is a weighted average of the last 10 observations, with the most recent days, getting the highest weighting, according to a linear smoothing of those ten daily ratings. That is, the last ten ratings are weighted as 0.20, 0.18, 0.16, 0.14, 0.12, 0.10, 0.08, 0.06, 0.04 , 0.02, so that the last week (last five trading days) get 80% of the weighting and the previous week gets a 20% weighting. This is opposed to a traditional ten day average where the last ten days each get a 0.10 weighting. The idea supporting the linear weighting approach is each days rating is slightly more important than the previous days rating, at least in a one month forecast. A rating above 50 is bullish, and vice versa.

The Multi Market One Month Tape Ratings

01 S&Ps	55.25	08 NIKKEI	50.31
02 GOLD	54.06	09 CORN	49.83
03 NASDAQ	53.55	10 SILVER	49.66
04 SOYBEANS	52.83	11 FTSE	48.48
05 YEN	52.72	12 WHEAT	48.47
06 BPOUND	52.36	13 BONDYIELD	48.43
07 CRUDEOIL	50.55	14 DOLLAR	47.18

Observations: The strong S&P tape rating (55.46) is also supported by a solid (53.55) rating for its sister index, the Nasdaq. Wayne take note that Wheat and Corn are both seasonally weak this time of year, which is supported by weak tape ratings here. The Dollar (47.18) comes in at the bottom of the list, which is supported by a positive rating by the Yen (52.72), which has a negative correlation (-0.87) to the Dollar.

THE S&P MULTI MOVING AVERAGE PATTERN RECOGNITION RESULTS

Recall my 2-200 Day moving average study where we look at the last trading day and where it is relative to 199 different moving averages beginning with 2 through 200 and then go back through history and find the best thirty matches to today's trend flow. Interestingly the current flow suggests the S&P is in for some additional consolidation over the next month, before heading higher over the intermediate time frame. The top 30 matches are listed below with four of the N day moving average statistics provided. These are not 30 mutually exclusive data points as five of them came from September of 2014.

S&P PEFORMANCE HISTORY GIVEN CURRENT 2-200 DAY MOVING AVERAGE PATTERNS												
#	DATE	THE % ABOVE OR BELOW THE				FORWARD S&P PERFORMANCE						
		200DMA	100DMA	50DMA	25DMA	DAY	WEEK	1MT	3MT	6MT	12MT	
0	20170616	6.58	2.60	1.55	0.67							
1	20140911	5.84	2.81	1.27	0.92	-0.60	0.70	-4.57	1.90	2.14	-1.82	
2	20140910	5.81	2.78	1.21	0.99	0.09	0.29	-4.49	1.53	2.43	-2.17	
3	20140325	6.88	2.70	1.78	0.39	-0.70	1.07	-0.12	5.03	5.38	10.48	
4	19960703	6.80	2.52	1.25	0.46	-2.22	-3.98	-1.47	3.03	11.25	36.37	
5	20140319	6.89	2.67	1.63	0.42	0.60	-0.44	0.22	5.30	8.04	12.28	
6	20140409	6.43	2.44	1.63	0.35	-2.09	-0.53	0.34	5.38	2.99	11.70	
7	20130926	6.96	2.41	1.10	1.39	-0.41	-1.18	3.60	8.44	9.06	16.73	
8	20140324	6.48	2.31	1.36	0.00	0.44	0.80	1.14	4.98	7.58	12.60	
9	19930401	5.52	2.70	1.13	0.09	-1.98	-1.88	-2.25	-0.28	2.44	-1.01	
10	20140917	5.85	2.77	1.41	0.61	0.49	-0.16	-5.74	0.57	3.63	-0.57	
11	19960613	7.21	2.56	1.59	-0.18	-0.31	-0.87	-3.25	1.89	9.09	33.74	
12	19930322	5.59	2.95	1.39	0.79	-0.03	0.42	-2.10	-0.83	1.63	4.66	
13	19930323	5.52	2.86	1.28	0.63	-0.15	0.72	-2.61	-1.24	2.00	4.41	
14	20140916	5.77	2.71	1.32	0.61	0.13	-0.81	-6.81	-1.31	4.11	-0.18	
15	20140317	6.92	2.70	1.61	0.56	0.72	-0.07	0.32	4.47	7.68	11.59	
16	20130924	7.06	2.44	1.07	1.55	-0.27	-0.14	3.22	8.01	9.43	17.73	
17	19960628	6.75	2.35	1.22	0.22	0.78	-2.70	-5.18	2.32	12.85	32.31	
18	19960624	6.77	2.25	1.26	-0.22	-0.06	1.05	-6.31	2.51	12.29	34.01	
19	20060327	4.83	2.58	1.46	0.74	-0.64	-0.29	0.62	-4.79	2.69	9.76	
20	20160908	6.04	2.90	0.86	0.07	-2.45	-1.56	-1.26	2.97	8.33	11.42	
21	20060329	4.85	2.53	1.52	0.77	-0.20	0.67	0.59	-2.30	2.53	9.18	
22	19930329	5.79	3.04	1.46	0.52	0.27	-1.88	-2.64	-0.02	2.07	0.38	
23	20140321	7.07	2.86	1.88	0.53	-0.49	-0.48	0.29	5.16	7.71	12.94	
24	19930331	5.90	3.09	1.52	0.47	-0.30	-1.98	-2.54	-0.25	1.61	-1.31	
25	20050310	5.40	2.32	1.15	0.35	-0.76	-1.57	-2.32	-0.92	2.67	5.98	
26	19930317	5.59	3.06	1.52	0.78	0.80	-0.05	0.14	0.05	2.35	5.04	
27	19960625	6.63	2.14	1.12	-0.25	-0.61	0.77	-5.58	2.60	12.35	32.99	
28	19960702	7.07	2.73	1.50	0.67	-0.18	-2.61	-1.65	3.03	9.41	34.21	
29	20140904	6.14	3.19	1.47	1.66	0.50	-0.01	-1.49	3.72	5.05	-3.83	
30	20060406	5.11	2.62	1.68	0.98	-1.03	-1.52	1.28	-2.67	3.10	10.29	
						#UP-DN =	10-20	9-21	11-19	20-10	30- 0	23- 7
						AVG%CHG=	-0.36	-0.61	-1.69	1.94	5.80	12.00
						MED%CHG=	-0.24	-0.37	-1.57	2.11	4.58	10.38
						HISTAVG=	0.03	0.17	0.69	2.06	4.23	8.80

AN 0-15 S&P SETUP FOR NEXT WEEK, JUNE 20-27

Over the last month, May20 through June 20, the S&P is up 2.32%.

The last fifteen years, the S&P was positive from May20-June20, the following week, June20-27, was negative.

Ten of those fifteen weeks, were down more than 1%.

Of course, it could be 1989. You just never know.

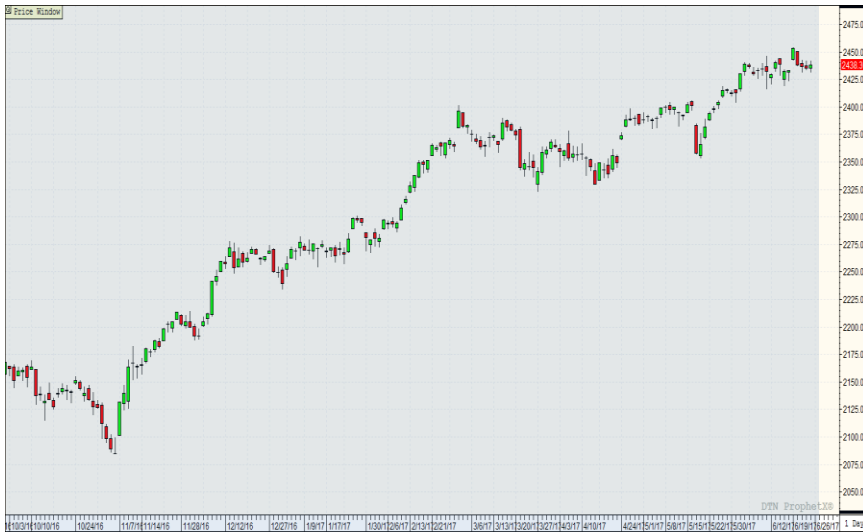
THE S&P FROM JUNE20-27 WHEN THE TRAILING MONTH WAS POSITIVE		
YEAR	MAY20-JUN20%	JUN20-27%
1987	10.34	0.06
1988	6.29	0.04
1989	0.00	2.24
1990	1.26	-1.10
1991	0.84	-0.27
1994	0.12	-1.79
1995	4.97	-0.47
1997	6.78	-1.27
1999	0.30	-2.05
2000	4.90	-1.72
2003	8.26	-1.96
2004	4.21	-0.05
2005	2.26	-2.09
2009	1.97	-0.25
2010	4.29	-3.65
2012	4.67	-1.76
2014	4.81	-0.10
2016	1.51	-3.97
2017	2.32	?

#UP-DN = 3-15
AVG%CHG= -1.12
MED%CHG= -1.19

2017 VS 1996 S&P COMPARISON

Let us take a look at 2017 vs 1996 over the eight months starting back in October, which allows us to catch the Turn of the Year. The top Chart shows the current 2016 Oct-2017 June chart. On the bottom is 1996 for the same eight months but extends throughtout the remainder of that year. In 1996, we had the obligatory late summer pullback and then a fall rally.

October 2016 – June 23, 2017



Oct1995

June1996

Dec1996

A 2-13 CORN/WHEAT ANGLE FOR THE LAST WEEK IN JUNE

Last week, June 16-23, Corn was down 6.76% and Wheat was down 1.66%. I have Ag data back to 1983. Since 1983, if both Corn and Wheat were negative last week, the following week, which is the last week in June, was down 13 of those 15 years for both of those markets.

Corn & Wheat in the Last Week of June When the Previous Week was Negative Based on September Contract				
YEAR	JUNE16-23		JUNE23-30	
	CRN%CHG	WHT%CHG	CRN%CHG	WHT%CHG
1987	-4.80	-1.74	-3.62	-1.86
1991	-1.16	-5.17	-4.38	-1.61
1992	-0.20	-0.63	-0.88	-0.91
1994	-10.30	-5.34	-2.30	-0.46
1997	-2.97	-4.33	-2.86	-1.41
1999	-0.11	-1.12	-1.70	0.19
2001	-1.51	-1.69	1.02	-1.71
2003	-1.36	-3.09	-4.99	-0.88
2004	-0.71	-2.07	-6.00	-2.47
2007	-11.56	-2.54	-9.75	-1.32
2008	-2.35	-3.49	-0.14	-2.88
2009	-4.56	-3.19	-10.76	-6.08
2010	-3.13	-0.57	2.04	0.95
2011	-2.77	-5.47	-2.99	-8.22
2016	-11.35	-5.86	-6.88	-4.35
2017	-6.76	-1.66	?	?
		#UP-DN =	2-13	2-13
		AVG%CHG=	-3.61	-2.20
		MED%CHG=	-2.99	-1.61

THE SECOND CALMEST FIRST HALF OF THE YEAR SINCE 1950

Since 1950, the average daily move for the S&P is 0.653%. The average daily move over the first half of 2017 was 0.321% which makes it the second least volatile first half of a year since 1950, second only to 1964 (0.297). Below is the second half performance for the previous ten least volatile first half of the years. The message is the lack of volatility is not a reason, in and of itself, to sell equities.

S&P PERFORMANCE IN THE SECOND HALF OF THE YEAR FOR THE TEN LEAST VOLATILE FIRST HALF YEARS SINCE 1950									
#	YEAR	1STHALF VOL%	FORWARD S&P PERFORMANCE						
			JUL%	AUG%	SEP%	OCT%	NOV%	DEC%	JUL-DEC%
1	1964	0.297	1.82	-1.62	2.87	0.81	-0.52	0.39	3.75
2	2017	0.321	?	?	?	?	?	?	?
2	1963	0.338	-0.35	4.87	-1.10	3.22	-1.05	2.44	8.14
3	1965	0.359	1.34	2.25	3.20	2.73	-0.88	0.90	9.88
4	1995	0.360	3.18	-0.03	4.01	-0.50	4.10	1.74	13.07
5	1972	0.378	0.23	3.45	-0.49	0.93	4.56	1.18	10.18
6	1971	0.392	-3.16	3.61	-0.70	-4.18	-0.25	8.62	3.43
7	1957	0.395	1.14	-5.61	-6.19	-3.21	1.61	-4.15	-15.58
8	1954	0.400	5.72	-3.40	8.31	-1.95	8.08	5.08	23.18
9	1952	0.406	1.76	-1.46	-1.96	-0.08	4.65	3.55	6.45
10	1961	0.417	3.28	1.96	-1.97	2.83	3.93	0.32	10.69
		#UP-DN =	8- 2	5- 5	5- 6	5- 5	6- 4	9- 1	9- 1
		AVG%CHG=	1.50	0.40	0.60	0.06	2.42	2.01	7.32

A 3-15 FIRST WEEK OF JULY CRUDE OIL ANGLE

Thirty Year Bond Yields dropped from 2.99 to 2.84% over the second quarter of 2017. I have Crude Oil data back to 1984. Over that time frame Crude Oil is 14-19 in the first week of July for an average/median loss of 1.97/1.84%. Interestingly, in those 18 years since 1984, in which Bond Yields declined in the second quarter, Crude Oil declined in the first week of July in 15 of those 18 years for an average/median loss of 1.85/1.49%.

FIRST WEEK OF JULY CRUDE OIL WHEN 2ND QTR YIELDS ARE DOWN				
YEAR	YIELDS		BASISPT CHG	CRUDEOIL JULY WK1
	MAR31	JUN31		
1985	11.82	10.29	-1.53	-0.25
1986	7.97	7.43	-0.54	-12.47
1989	9.15	8.05	-1.10	1.82
1990	8.58	8.41	-0.17	-3.28
1992	7.94	7.79	-0.15	-0.89
1993	6.90	6.68	-0.22	-4.11
1995	7.40	6.63	-0.77	-1.67
1997	6.99	6.79	-0.20	-1.32
1998	5.95	5.62	-0.33	-3.49
2000	5.96	5.88	-0.08	-7.27
2002	5.75	5.52	-0.23	-0.27
2003	4.93	4.57	-0.36	-0.67
2005	4.85	4.22	-0.63	7.61
2010	4.76	3.91	-0.85	-1.89
2011	4.55	4.38	-0.17	3.52
2012	3.27	2.76	-0.51	-0.55
2014	3.51	3.34	-0.17	-1.85
2016	2.61	2.31	-0.30	-6.20
2017	2.99	2.84	-0.15	?
			#UP-DN =	3-15
			AVG%CHG=	-1.85
			MED%CHG=	-1.49

AN UPDATE ON THE GOLD/SILVER RATIO MODEL

In July of 2016, I proposed a Gold/Silver Model for intermediate trading. Let us review that strategy today and see what's its current message is. For review, the idea behind the model, as I proposed a year ago plays like this. I have Gold and Silver data dating back to 1983. The end of the year prices for each are given below. Over that period of time, the Gold to Silver ratio has averaged 66.5

GOLD VS SILVER PRICES 1983-2017							
YEAR	GOLD	SILVER	GOLD/SILV	YEAR	GOLD	SILVER	GOLD/SILV
1983	388.00	9.02	43.02	2001	279.00	4.58	60.93
1984	309.70	6.30	49.20	2002	348.20	4.80	72.53
1985	331.10	5.83	56.83	2003	416.10	5.95	69.90
1986	406.90	5.40	75.35	2004	438.40	7.16	61.23
1987	488.90	6.68	73.17	2005	518.90	8.82	58.83
1988	412.30	6.04	68.28	2006	638.00	12.82	49.77
1989	405.20	5.21	77.80	2007	838.00	14.80	56.63
1990	396.20	4.19	94.51	2008	884.00	11.27	78.46
1991	355.20	3.88	91.48	2009	1096.20	16.82	65.16
1992	333.10	3.67	90.71	2010	1421.40	30.91	45.99
1993	391.90	5.09	77.04	2011	1566.80	27.88	56.21
1994	384.40	4.87	78.87	2012	1675.80	30.17	55.54
1995	388.10	5.16	75.17	2013	1202.30	19.34	62.17
1996	369.20	4.74	77.89	2014	1183.90	15.56	76.06
1997	289.90	5.93	48.86	2015	1060.30	13.77	76.97
1998	289.20	4.99	57.98	2016	1050.00	15.94	72.15
1999	289.60	5.41	53.50	2017	1150.00	15.94	72.16
2000	273.60	4.59	59.67	JUL7	1209.70	15.40	78.55
AVG GOLD/SILVER RATIO = 66.5							

Some metal traders feel that Silver has traditionally attracted more speculative interest than Gold due to its lower cost and is more inclined to get overbought/oversold than its sister metal. But regardless, my original position was regardless for the motivation for the divergence in the two metal prices, one would expect that relationship to work back to a norm over time? My analysis was prompted at the time by the observation a year ago that Gold and Silver which I have with a 0.88 correlation over the last year, weren't exactly in sync at the moment, due to fluctuations centered around the Brexit events.

The trading model I proposed was that given a historical Gold/Silver relationship of 66.5,

1. If the G/S ratio reaches 80, Sell Gold short and Buy Silver
2. If the G/S ratio reached 50, Buy Gold and Sell Silver Short.
3. Hold the above trades until ratio reaches neutrality (66.5), liquidate and sit in cash.

GOLD/SILVER RATIO MODEL TRADING RESULTS

Below are the results of the model dating back over the life of my metal database, 1983-today.

1. Assume you take a \$100,000 position in each side of the Gold & Silver Position.
2. There have nine profitable trades, with the 9th trade still open.
3. At the onset, the ratio was 41.31, dictating, LongGold/ShortSilver
4. 100% of the profit comes from Silver position, and you could argue drop the Gold position, but I view Gold as the position hedge and it successfully offset the one Silver loss in Trade #6.
5. But continuing 4, one could certainly experiment with derivations of initial model for enhanced backtested returns, for example,
6. Model returns would be enhanced considerably, if I reflected money market returns during cash positions

Wayne Whaley's Gold Silver Ratio Trading Model Results 1983-July7, 2017

Trade	Date	Gold	Silver	G/S	Trade	GoldProfit\$	SilverPosition\$	Combined\$
1open	19830103	453.40	10.98	41.31	+/-	0.00	0.00	200000.00
1close	19860401	334.43	5.05	66.26		-24443.53	59652.34	235208.81
2open	19900124	418.76	5.23	80.05	-/+	-24443.53	59652.34	235208.81
2close	19950504	392.13	6.12	64.08		-22148.21	89655.59	267507.38
3open	19961106	377.61	4.70	80.34	-/+	-22148.21	89655.59	267507.38
3close	19970909	304.05	4.71	64.56		-2942.93	91836.86	288893.94
4open	19971210	284.11	5.83	48.69	+/-	-2942.93	91836.86	288893.94
4close	20010809	273.67	4.20	65.17		-2411.35	115520.09	313108.75
5open	20030529	369.57	4.57	80.83	-/+	-2411.35	115520.09	313108.75
5close	20040112	426.67	6.61	64.59		-17561.50	154059.03	336497.53
6open	20060330	588.15	11.90	49.41	+/-	-17561.50	154059.03	336497.53
6close	20080905	797.43	12.25	65.09		26382.94	134208.03	360590.97
7open	20081010	855.04	10.55	81.01	-/+	26382.94	134208.03	360590.97
7close	20090527	953.21	14.84	64.23		12460.05	176672.22	389132.25
8open	20101109	1409.99	28.90	48.79	+/-	12460.05	176672.22	389132.25
8close	20130624	1275.56	19.49	65.46		7477.96	196411.53	403889.50
9open	20150826	1126.95	14.02	80.39	-/+	7477.96	196411.53	403889.50
9	20170707	1209.70	15.40	78.55	open	-1587.02	211230.50	409643.47

I don't consider myself a student of Metal fundamentals, but I would assume this is such a natural approach to metal evaluation that similar has been done by many others. I didn't take the time to research the history of such, and if I broach on anyone else's work, apologies. My intent was to observe that Silver still looks a little cheap, at least relative to Gold.

SECOND QUARTER EARNINGS OBSERVATIONS

Below are the Quarterly S&P Earnings since 2010. The YRE Column is the Trailing Year or four Quarter's Earnings. P/E is the S&P Price divided by Trailing Year Earnings. The current P/E ratio based on data through the second quarter earnings estimate is 23.30. I have the average P/E since 1950 at 18.20, but in those 69 quarters when Tbills were less than 2.0%, the average P/E was 23.3, which based on Friday's S&P close is exactly where we stand. Conversely, fyi, when Tbills were 7% or higher, the average P/E was 10.85. Some fundamentalist would point out that first quarter earnings were at record levels and the trend appears headed higher. We are beginning second quarter earnings announcement season. According to the Standard & Poor's website, 30 companies have reported with 24 beating expectations. Three have met and 3 have missed. Historically about two thirds of company's beat expectations. The picture may be a bit more clear by next weekend as some 73 more S&P companies will release second quarter earnings this week. In terms of disclosure, I have never found a system for consistently forecasting the direction of the S&P based on trailing earnings levels, trailing earnings trends, or a combination thereof. Conversely, the trailing S&P direction does have some correlation to forward earnings and economy and is one of the ten members of the Conference Boards, Leading Economic Indicators LEI. But back to the prospects for the S&P, I think it is safe to observe, Stocks are not cheap, but Valuation doesn't appear to be a problem.

Quarterly S&P Earnings Since 1970

YRQTR	S&P	TBILL	QTR E	YRE	P/E
1003	1169.43	0.15	17.48	60.93	19.19
1006	1030.71	0.17	19.68	67.10	15.36
1009	1141.20	0.16	19.52	71.86	15.88
1012	1257.64	0.12	20.67	77.35	16.26
1103	1325.83	0.09	21.44	81.31	16.31
1106	1320.64	0.01	22.24	83.87	15.75
1109	1131.42	0.01	22.63	86.98	13.01
1112	1257.60	0.00	20.64	86.95	14.46
1203	1408.47	0.06	23.03	88.54	15.91
1206	1362.16	0.08	21.62	87.92	15.49
1209	1440.67	0.09	21.21	86.50	16.66
1212	1426.19	0.04	20.65	86.51	16.49
1303	1569.16	0.06	24.22	87.70	17.89
1306	1606.28	0.04	24.87	90.95	17.66
1309	1681.55	0.00	24.63	94.37	17.82
1312	1848.36	0.06	26.48	100.20	18.45
1403	1872.34	0.03	24.87	100.85	18.57
1406	1960.23	0.02	27.14	103.12	19.01
1409	1972.29	0.01	27.47	105.96	18.61
1412	2058.90	0.04	22.83	102.31	20.12
1503	2067.89	0.03	21.81	99.25	20.84
1506	2063.11	0.01	22.80	94.91	21.74
1509	1920.03	0.00	23.22	90.66	21.18
1512	2043.94	0.15	18.70	86.53	23.62
1603	2059.73	0.19	21.72	86.44	23.83
1606	2098.86	0.25	23.28	86.92	24.15
1609	2168.27	0.26	25.39	89.09	24.34
1612	2238.83	0.48	24.16	94.55	23.68
1703	2362.72	0.74	27.46	100.29	23.56
1706	2459.27	0.99	28.52	105.53	23.30

** through July 14, 2017

TWELVE MONTHS WITHOUT A FIVE PERCENT S&P CORRECTION

You might want to store July 26, 2017 away in your memory, so you can tell your grandchildren about the day the Volatility Index (VIX) traded below 9 intraday owing greatly to the fact we have now been over a year without a five percent correction in the S&P.

That puts the current streak in a group with seven other time periods since 1950, which have gone longer than a year without a 5% Correction.

It is the first time in the twenty first century this has occurred with the last similar period occurring over twenty years ago, 1995-96. I think it is also probably important to note that in the last 68 years, the S&P has never gone two years without a five percent correction, suggesting there is likely a hard rain a coming in the not too distant future.

By the way, since 1950, I have August-October as the weakest quarter of the year, and it would be quite a feat to make it until the end of the year unscathed.

The One Year Absent a 5% Correction List – Since 1950

#	STARTDATE	ENDDATE	#TRDDAYS	MTS-DAYS
1	19580102	19590915	429	20-13
2	19941213	19960715	399	19-02
3	19631122	19650609	386	18-17
4	19921009	19940329	370	17-20
5	19531013	19550117	315	15-04
6	19601107	19620126	304	14-19
7	20160627	20170728	274	12-29
8	19621031	19631122	266	12-23

FOUR CONSECUTIVE POSITIVE S&P MONTHS

Since posting a fractional loss in February, the S&P has reeled off four consecutive winning months 0.91, 1.16, 0.48 and 1.93% in July. Over the last thirty years, the fourth consecutive up month of a winning streak as been followed by a positive year in all 21 of those cases for an average/median gain of 14.87/14.29%. The twelve month signal is in double signal mode, as this setup presented itself earlier this year from November through February. Had February not posted a modest loss (-0.04%) the S&P would have been positive nine consecutive months through July.

THE S&P AFTER FOUR CONSECUTIVE POSITIVE MONTHS

#	YEAR	MT	TRAILING FIVE MONTHS					FORWARD S&P PERFORMANCE			
			MT1%	MT2%	MT3%	MT4%	MT5%	1MT%	3MT%	6MT%	12MT%
1	1991	FEB	-0.67	5.99	2.48	4.15	6.73	2.22	6.20	7.73	12.43
2	1992	DEC	-2.40	0.91	0.21	3.03	1.01	0.70	3.66	3.40	7.06
3	1995	MAR	-3.95	1.23	2.43	3.61	2.73	2.80	8.80	16.72	28.92
4	1996	FEB	-0.50	4.10	1.74	3.26	0.69	0.79	4.48	1.81	23.48
5	1996	NOV	-4.57	1.88	5.42	2.61	7.34	-2.15	4.46	12.06	26.21
6	1997	JUL	-4.26	5.84	5.86	4.35	7.81	-5.75	-4.16	2.72	17.43
7	1998	FEB	-3.45	4.46	1.57	1.02	7.04	4.99	3.95	-8.75	18.01
8	1998	DEC	-14.56	6.22	8.03	5.91	5.64	4.10	4.65	11.69	19.53
9	2003	JUN	-1.70	0.84	8.10	5.09	1.13	1.62	2.20	14.10	17.07
10	2004	JAN	-1.20	5.50	0.71	5.08	1.73	1.22	-2.11	-2.60	4.43
11	2004	NOV	-3.43	0.23	0.94	1.40	3.86	3.25	2.54	1.51	6.45
12	2006	APR	-0.11	2.56	0.05	1.11	1.22	-3.09	-2.59	5.14	13.11
13	2006	SEP	-3.09	0.01	0.51	2.13	2.46	3.15	6.17	6.36	14.29
14	2009	JUN	-10.99	8.54	9.39	5.31	0.02	7.41	14.98	21.29	12.12
15	2012	MAR	-0.51	0.85	4.36	4.06	3.13	-0.75	-3.29	2.29	11.41
16	2012	SEP	-6.27	3.96	1.26	1.98	2.42	-1.98	-1.01	8.92	16.72
17	2013	FEB	-1.98	0.28	0.71	5.04	1.11	3.60	7.66	7.81	22.76
18	2013	DEC	-3.13	2.97	4.46	2.80	2.36	-3.56	1.30	6.05	11.39
19	2014	MAY	-3.56	4.31	0.69	0.62	2.10	1.91	4.15	7.49	9.56
20	2016	JUN	-0.41	6.60	0.27	1.53	0.09	3.56	3.31	6.67	15.46
21	2017	FEB*	-1.94	3.42	1.82	1.79	3.72	-0.04	2.04	4.51	4.51
22	2017	JUL	-0.04	0.91	1.16	0.48	1.93				
							#UP-DN =	14- 7	16- 5	19- 2	21- 0
							AVG%CHG=	1.14	3.21	6.52	14.87
							MED%CHG=	1.62	3.66	6.36	14.29

SEPTEMBER-DECEMBER WHEN PRECEDED BY STABILITY

The average daily percent change for the S&P in 2017 is 0.306% which puts it in second place behind 1964 for lowest volatility of all years since 1950 for the comparable Jan-August time frame. Below I have listed the ten other years with the lowest Jan-August volatility measures. The last four months of those ten years were all positive for a very respectable average/median four month gain of 6.44/5.57% with December finishing the year positive in all ten years.

SEPT-DEC S&P PERFORMANCE AFTER TEN LEAST VOLATILE JAN-AUGUST								
#	YEAR	AVG S&P%CHG		S&P PERCENT CHANGE				
		VOL	JAN-AUG	SEP	OCT	NOV	DEC	SEP-DEC
1	1964	0.294	9.08	2.87	0.81	-0.52	0.39	3.57
2	2017	0.306	10.55					
3	1965	0.340	2.86	3.20	2.73	-0.88	0.90	6.03
4	1963	0.346	14.90	-1.10	3.22	-1.05	2.44	3.48
5	1995	0.358	22.34	4.01	-0.50	4.10	1.74	9.62
6	1952	0.378	5.30	-1.96	-0.08	4.65	3.55	6.15
7	1972	0.391	8.82	-0.49	0.93	4.56	1.18	6.27
8	1961	0.410	17.14	-1.97	2.83	3.93	0.32	5.11
9	1967	0.416	16.57	3.28	-3.53	0.75	2.63	3.02
10	1959	0.425	7.95	-4.56	1.13	1.32	2.76	0.49
11	1954	0.426	20.23	8.31	-1.95	8.08	5.08	20.62
#UP-DN =				5- 5	6- 4	7- 3	10- 0	10- 0
AVG%CHG=				1.16	0.56	2.50	2.10	6.44
MED%CHG=				1.19	0.87	2.63	2.09	5.57

All eleven of those non volatile Jan-Aug's were accompanied by positive direction, as was the subsequent end of years, in line with the thesis that 'As the year begins, So shall it end'.

THE BEST/WORST PERIODS OF A GENERIC MONTH – MULTI MARKETS

A typical calendar month with one holiday has twenty trading days. For this study, I took the trading performance of every month since 2000 and broke it down into twenty trading days, with the first ten trading days making up the first ten days and the last ten trading days making up the last ten days. I looked at data through July of 2017. Day traders, should find some of the information useful. In this table Day1-Day2 = 16-05 means the last five days of the month through the first five of the following month.

MULTI-MARKET PERFORMANCE IN A GENERIC MONTH 2000-JULY2017												
THE BEST TIME PERIOD OF THE MONTH							THE WORST TIME PERIOD OF THE MT					
MARKET	DAY1-DAY2	#UP	#DN	PCTUP	AVG%		DAY1-DAY2	#UP	#DN	PCTUP	AVG%	
TBDYLD	1 3	130	80	61.90	0.63		20 20	80	130	38.10	-0.37	
S&PS	9 3	135	74	64.59	0.64		03 7	96	114	45.71	-0.20	
GOLD	16 13	123	85	59.13	1.00		14 14	98	112	46.67	-0.16	
OILCRD	6 7	128	82	60.95	0.50		4 5	93	117	44.29	-0.43	
CORN	18 4	121	88	57.89	0.44		14 18	93	117	44.29	-0.19	
BPOUND	16 17	126	84	60.00	0.06		1 6	88	122	41.90	-0.23	
WHEAT	20 2	118	91	56.46	0.36		13 6	90	119	43.06	0.25	
BNSOY	5 9	124	86	59.05	0.88		12 17	99	111	47.14	0.04	
DOLLAR	5 6	123	87	58.57	0.10		20 2	97	112	46.41	-0.02	
NIKKEI	1 1	126	84	60.00	0.17		7 11	65	97	40.12	-0.29	
SILVER	16 8	129	80	61.72	1.30		5 11	83	98	45.86	-0.48	
FTSE	1 1	131	79	62.38	0.24		19 20	98	112	46.67	0.06	
NASDAQ	1 1	132	78	62.86	0.17		14 15	100	109	47.85	-0.28	
YEN	7 13	113	97	53.81	0.07		18 9	94	115	44.98	-0.05	

There is a discernable first day of the month bounce for the four 'equity' markets which I maintain databases for, which is logical given monthly inflows into investment programs.

Percent Positive on the First Trading Day of the Month			
SPs	60.95	Nasdaq	62.86
Ftse	62.4	Nikkei	60.00

Owing to the inflationary tendency of earnings, the S&P has a bullish bias, up 75% of years, 60% of months and 53% of days (since 1950). Since 2000, a generic S&P month tends to be up across the monthly board, with the small exception of trading days 3 through 7, down 54.3% of the time. So if you were going to set up a monthly withdrawal in your retirement account, wait for the first of month bounce and do it on day 3.

Similarly, if you are setting up a monthly investment program for your bond fund, consider that Bond Yields are down on the last trading day of month 61.9% of the time, yet conversely, positive over the first three trading days of the month in 61.9% of cases, which means Bond Prices are up 61.9% of the time on the last day of the month and similarly down 61.9% of the time on the first three days of the month.

THE TRUMP RALLY

In case you were wondering this weekend, the S&P has rallied 16.86% since Donald Trump was elected President on November 8, 2016, and has been up in each of those eleven calendar months, with the exception of a fractional 0.04% loss in March. Since 1950, there have only been three other periods where the S&P went ten calendar months without experiencing at least a one half percent losing month (1954, 58 and 95). And btw, all three of those occasions saw higher S&P prices 3, 6 and 12 months later. The current rally now puts us in the midst of the 6th longest period since 1950 without a 5% correction, having not experienced one since June of 2016. This is the longest such streak absent a 5% correction in twenty years.

The Trump Rally

Month	S&P	%Chg
Election Day Nov8	2139.56	
2016 Nov 8-31	2198.81	2.77
2016 December	2238.83	1.82
2017 January	2278.87	1.79
2017 February	2363.64	3.72
2017 March	2362.72	-0.04
2017 April	2384.20	0.91
2017 May	2411.80	1.16
2017 June	2423.41	0.48
2017 July	2470.30	1.93
2017 August	2471.65	0.05
2017 Sept 15	2488.11	<u>1.16</u>
TRUMP RALLY =		16.86

Longest Streaks Absent a 5% S&P Correction

(Since 1950)				
#	STARTDATE	ENDDATE	#TRADINGDAYS	MTS-DAYS
1	19580102	19590915	429	20-13
2	19941213	19960715	399	19-02
3	19631122	19650609	386	18-17
4	19921009	19940329	370	17-20
5	19531013	19550117	315	15-04
6	20160627	20170915	308	14-19

S&P 4TH QUARTERS IN YEARS WHOSE FIRST NINE MONTHS LOOK LIKE 2017

I took the percent change of each of the nine S&P months in 2017 and compared each month individually to the same month in each of the previous 67 years (since 1950) in search of the best matches, 'net' for the entire nine months. The column in the table below, noted as 'RATING', indicates the level of Match between the first nine months of 2017 and those same nine months in the year noted with '0' being a perfect match. Based on this approach, the top 20 matches are listed below in order of best match. The top 18 matches were all Fourth Quarter positive. There is one week remaining in September. In case there is modest change, I will repost this study next week, updated with the final September numbers. Bearing a game changing market event in the next week, the story will not change.

FOURTH QUARTERS BASED ON PATTERN RECOGNITION TO THE FIRST NINE MONTHS OF 2017

S&P PERFORMANCE FOR THE FIRST NINE MONTHS											FOURTH QTR PERFORMANCE				
#	YEAR	RATING	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	4THQTR
0	2017	0.00	1.79	3.72	-0.04	0.91	1.16	0.48	1.93	0.05	1.24**				
1	1964	10.09	2.69	0.99	1.52	0.61	1.15	1.64	1.82	-1.62	2.87	0.81	-0.52	0.39	0.14
2	1972	12.36	1.81	2.53	0.59	0.44	1.73	-2.18	0.23	3.45	-0.49	0.93	4.56	1.18	5.77
3	1995	13.64	2.43	3.61	2.73	2.80	3.63	2.13	3.18	-0.03	4.01	-0.50	4.10	1.74	5.08
4	2004	13.95	1.73	1.22	-1.64	-1.68	1.21	1.80	-3.43	0.23	0.94	1.40	3.86	3.25	8.88
5	2006	15.35	2.56	0.05	1.11	1.22	-3.09	0.01	0.51	2.13	2.46	3.15	1.65	1.26	6.65
6	2005	16.65	-2.53	1.89	-1.91	-2.01	3.00	-0.01	3.60	-1.12	0.69	-1.77	3.52	-0.11	2.08
7	1992	18.63	-1.99	0.96	-2.18	2.79	0.10	-1.74	3.94	-2.40	0.91	0.21	3.03	1.01	5.03
8	1959	18.70	0.43	-0.07	0.05	3.88	1.89	-0.36	3.49	-1.50	-4.56	1.13	1.32	2.76	5.08
9	1993	18.74	0.70	1.05	1.87	-2.54	2.28	0.07	-0.53	3.44	-1.00	1.94	-1.29	1.01	2.12
10	1961	19.26	6.32	2.69	2.55	0.38	1.91	-2.88	3.28	1.96	-1.97	2.83	3.93	0.32	7.43
11	2014	19.27	-3.56	4.31	0.69	0.62	2.10	1.91	-1.51	3.77	-1.55	2.32	2.45	-0.42	5.48
12	1996	19.67	3.26	0.69	0.79	1.34	2.29	0.23	-4.57	1.88	5.42	2.61	7.34	-2.15	9.68
13	1988	19.86	4.04	4.18	-3.33	0.94	0.32	4.33	-0.54	-3.86	3.97	2.60	-1.89	1.47	2.75
14	1955	20.81	1.81	0.35	-0.49	3.77	-0.13	8.23	6.07	-0.78	1.13	-3.05	7.49	-0.07	3.39
15	2013	21.24	5.04	1.11	3.60	1.81	2.08	-1.50	4.95	-3.13	2.97	4.46	2.80	2.36	9.49
16	2015	21.34	-3.10	5.49	-1.74	0.85	1.05	-2.10	1.97	-6.26	-2.64	8.30	0.05	-1.75	7.46
17	1965	21.35	3.32	-0.15	-1.45	3.42	-0.77	-4.86	1.34	2.25	3.20	2.73	-0.88	0.90	2.49
18	2016	22.20	-5.07	-0.41	6.60	0.27	1.53	0.09	3.56	-0.12	-0.12	-1.94	3.42	1.82	3.74
19	2012	22.42	4.36	4.06	3.13	-0.75	-6.27	3.96	1.26	1.98	2.42	-1.98	0.28	0.71	-2.65
20	1958	23.24	4.28	-2.06	3.09	3.18	1.50	2.61	4.31	1.19	4.84	2.54	2.24	5.20	9.73
											#UP-DN=	15-5	16-4	15-5	19-1
** SEPTEMBER S&P %CHG FOR 2017 IS THROUGH SEPT 22											AVG%CHG=	1.44	2.37	1.04	4.99
											MED%CHG=	1.67	2.63	1.01	5.08