A Red Ryder Christmas

A Bean Counter's Journey Through The World of Seasonal Barometers

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Addendum 1 – The January Barometer – The Detailed Breakdown Addendum 2 – Wayne's Version of the 'Sell in May and Go Away Story Addendum 3 – The Election Cycle Story Addendum 4 – The Wayne Whaley Story

A Red Ryder Christmas – Abstract

Owing tremendously to previous students of seasonal tendencies, such as Yale Hirsch and Arthur Merrill, astute traders have, for several decades, been cognizant of the intermediate implications arising from the market's observed disposition at the turn of each calendar year. For the last half century, indicators such as the 'January Barometer', the 'First Five Days of January', and various 'End of the Year' holiday studies have served to document these tendencies.

My initial objective was to determine if January's predictive reputation was statistically warranted, and if any other month could provide a possible midyear update and/or validation of any insight imparted upon the markets future direction by January's behavior. This curiosity into the nature of seasonal barometers, eventually led me to discoveries far beyond the original intended objective of simply evaluating the predictive abilities of each of the twelve months.

As a study benchmark, a full review of the January barometer's track record was documented. It was noted that January did indeed exhibit statistically significant forecasting accuracy when focused on positive Januarys, but could only manufacture coin toss odds when dealt with negative Januarys.

The month/year comparison analysis, for each of the twelve months, began with an evaluation of each month's ability to forecast the direction of the next twelve month's S&P performance, that is, what percent of the years did the sign of each month's move, match the sign of the next twelve months direction. Based on this 'same sign', evaluation criteria, January was, indeed, the best 12 month forecasting tool, with a 70.97% probability of forecasting the next year's direction, as compared to 66.13% for April, which was finished a distant second.

Noting that this was not an extremely scientific approach, I then embarked upon converting all the monthly and yearly moves to normalized measures and examined each month's ability to post a move that fell within one standard deviation of the next twelve month's normalized move. Based on this evaluation approach, January and June finished tied for first with a 62.90% probability of a successful one standard deviation match of the next 12 months S&P move.

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Thirdly, I thought it prudent to calculate the Pearson Correlation Coefficient (-1 to +1) between each of the twelve months and their corresponding following year. Again, the month of January finished first (+0.246) in this correlation measurement followed by April (+0.166). I concluded, if you were forced to hitch your wagon to one of the 12 calendar months, January was the horse to follow. However, disappointed that none of the 12 months produced more reliable correlation statistics than were observed in this study, I pondered if better seasonal barometers were not available.

In an effort to resolve, which time period of the year was the King Pin of seasonal barometers, I implored my computer to exhaustively scan S&P performance over every time period of the year and determine which time frame's behavior was proprietor of the highest correlation measures, relative to the following year's performance. This involved an analysis of 30,295 different time frames throughout the year, ranging from 7 to 90 days.

I found that if one does not constrain his seasonal barometer selection solely to the twelve calendar months, the time period from November 19 through January 19 has a superior 12 month forecasting record than both the traditional January Barometer, and any other 7 to 90 day time period you care to consider. This time period, which I have labeled the TOY (Turn of Year) Barometer, accurately predicted the next year's market direction in 80.65% of the post 1949 database cases as compared to 70.97% for the month of January, with a measurably higher correlation coefficient (+0.39). Thirty one of the thirty two +3% TOYs were followed by positive years and nine of the 13 negative TOYs were followed by negative years, with 11 of those 13 negative TOY periods experiencing at least a 12.5% Drawdown at some point over the following 12 months.

In a very special Red Ryder TOY setup case; if a negative TOY Year (January 19 – January 19), concludes with a positive TOY period (November 19 – January 19), the following TOY year has been up at least 10% in all ten occasions this setup has developed with a remarkable ten signal average/median annual return of 27.25/28.71%, catching five of the six +30% years over this post 1949 sample set. Unfortunately, I was not able to identify any mid-year periods which provided comparable forecasting accuracy to that identified by several periods residing between November and February.

I combined the Toy Barometer and Red Ryder Signals with my versions of two traditional seasonal stalwarts, the 'Sell In May and Go Away' thesis, and the Election Cycle Phenomenon, to produce the following five signal rating results.

SEASONAL MODEL PERFORMANCE						
SEASONAL	NUMBER	AVERAGE				
RATING	OF YEARS	ANNUAL%CHG				
-1	6.29	-19.85				
0	11.62	2.98				
1	15.58	7.10				
2	17.20	12.14				
3	9.55	28.09				
4	2.90	37.04				

I then provided the 62 year trading statistics for both an unleveraged and leveraged trading model with exposure based on the above seasonal model's ratings.

MARKET EXPOSURE VS SSNL RATING							
SEASONAL EQUITY EXPOSURE							
RATING	UNLEVERAGED	LEVERAGED					
-1	0.00	-0.50					
0	0.25	0.00					
1	0.50	0.50					
2	0.75	1.00					
3	1.00	1.50					
4	1.00	2.00					

EXPOSURE MODEL STATISTICS COMPARISON							
STATISTIC	B&H	UNLEV-	LEVER-				
	S&P	ERAGED	ERAGED				
PCT OF UP YEARS =	73.02	87.30	90.48				
AVG YRLY % CHG =	8.71	11.09	16.49				
MAX DRAWDOWN =	-56.78	-26.34	-35.12				
AVG DAILY VOLAT =	0.659	0.358	0.492				
BETA TO S&P =	1.00	0.543	0.747				
RISK ADJ ALPHA =	0.00	11.69	13.38				

B&H = Buy & Hold

A well researched exposure model should arguably consist of some mix of seasonal, tape, interest rate influences, sentiment, economic and valuation systems. The intermediate seasonal model, which I have introduced, is an excellent foundation for such an endeavor.

The January Barometer

The table below shows the S&P performance for the post 1949 time period as a function of three different levels of January performance.

FORWARD S&P PERFORMANCE VS JANUARY PERFORMANCE							
CATEGORY		WEEK	MONTH	QTR	6MTS	12MTS	
AFTER A	#UP-DN =	13- 5	12- 6	17- 1	17- 1	17- 1	
+4%	AVG%CHG=	0.65	1.01	4.69	9.38	15.44	
JANUARY	MED%CHG=	0.78	0.62	4.78	7.32	13.82	
AFTER A	#UP-DN =	13- 7	12- 8	15- 5	14- 6	16- 4	
0 TO 48	AVG%CHG=	0.41	0.30	2.87	3.91	10.21	
JANUARY	MED%CHG=	0.79	0.52	2.96	2.73	10.70	
AFTER A	#UP-DN =	13-11	9-15	13-11	12-12	13-11	
NEGATIVE	AVG%CHG=	-0.19	-1.36	0.49	-0.76	1.25	
JANUARY	MED%CHG=	0.50	-1.92	0.52	0.44	3.28	
	HIST AVG=	0.17	0.72	2.17	4.36	8.69	

The detailed annual performance breakdown for the January Barometer is included in Addendum 1. The primary criticism of the January Barometer is that it doesn't provide a lot of guidance for Bearish setups as the annual performance after a negative January is close to a coin toss. Let us begin our journey of alternatives with an examination of January stacks up against the remaining eleven calendar months in terms of 12 month forecasting ability.

The Month to Year Directional Comparison

JANUA	ARY VS T	'HE FOLL	OWING YE	EAR DIRE	CTIONA	L COMPA	RISON
YR	JAN %CHG	NEXT YR%		YR	JAN %CHG	NEXT YR%	SIGN MATCH
1950	2.34	27.04	1	1981	-4.57	-7.06	1
1951	6.02	11.45	1	1982	-1.75	20.68	0
1952	1.56	9.28	1	1983	3.31	12.46	1
1953	-0.72	-1.14	1	1984	-0.92	9.93	0
1954	5.12	40.45	1	1985	7.41	17.90	1
1955	1.81	19.63	1	1986	0.24	29.42	1
1956	-3.65	2.05	0	1987	13.18	-6.21	0
1957	-4.18	-6.75	1	1988	4.04	15.72	1
1958	4.28	32.97	1	1989	7.11	10.63	1
1959	0.43	0.29	1	1990	-6.88	4.51	0
1960	-7.15	11.10	0	1991	4.15	18.86	1
1961	6.32	11.43	1	1992	-1.99	7.34	0
1962	-3.79	-3.83	1	1993	0.70	9.76	1
1963	4.91	16.37	1	1994	3.25	-2.32	0
1964	2.69	13.66	1	1995	2.43	35.20	1
1965	3.32	6.08	1	1996	3.26	23.61	1
1966	0.49	-6.75	0	1997	6.13	24.69	1
1967	7.82	6.50	1	1998	1.02	30.54	1
1968	-4.38	11.68	0	1999	4.10	8.97	1
1969	-0.82	-17.46	1	2000	-5.09	-2.04	1
1970	-7.65	12.77	0	2001	3.45	-17.26	0
1971	4.05	8.41	1	2002	-1.56	-24.29	1
1972	1.81	11.63	1	2003	-2.74	32.19	0
1973	-1.71	-16.77	1	2004	1.73	4.43	1
1974	-1.00	-20.29	1	2005	-2.53	8.36	0
1975	12.28	31.02	1	2006	2.56	12.36	1
1976	11.83	1.16	1	2007	1.41	-4.15	0
1977	-5.05	-12.53	1	2008	-6.12	-40.09	1
1978	-6.15	11.97	0	2009	-8.57	30.03	0
1979		14.24		2010	-3.70	19.76	0
1980	5.76	13.48	1	2011	2.26	2.04	1

January experienced a 70.97% direction matching success rate.

_		ITY OF AN		-	H'S DIRECTION ECTION
1	JAN	70.97	7	NOV	56.45
2	APR	66.13	8	JUN	54.84
3	FEB	64.52	8	JUL	54.84
4	MAY	58.06	10	SEP	51.61
5	DEC	58.06	11	AUG	50.00
5	MAR	56.05	12	OCT	50.00

Applying the same approach to the remaining 11 months yields;

Since 1950, January has the best record (70.97%) of calling the direction of the next year's market direction. This approach provides useful information, but can be misleading because this calculation is based solely on the sign of the period's move, which in many cases is misleading. For example, if January were down 0.5% and then followed by a +1% year, it would be recorded as a miss, when in fact, the flat January accurately forecast a subsequent sideways year. It would be more insightful to measure what percentage of measurements was the degree of the monthly move followed by an annual move of similar magnitude. This observation begs for a normalization approach to measuring monthly and yearly performance.

The Month to Year Normalized Hit or Miss Comparison

Normalization is a popular statistical tool which allows you to take apples (months) and compare them to oranges (years) in a statistically fair approach. In this study, the normalized measure of the two data sets (months and years) will be utilized to examine what percent of cases did the percent change of each month fall within one standard deviation of the subsequent percent change of the following year's performance.

An average S&P month has a 0.72% return with a standard deviation of 3.19%. Any month with a 0.72% return would have a normalized value of 0, and a month with a return 0.72+3.19 = 3.91% would have a normalized value of +1. An average year since 1950 is 8.67%, with a standard deviation of 13.45. Any year with a return of 8.67%, would have a normalized value of 0, while a year with a return of 8.67+13.45 = 22.12, would have a normalized value of +1. Assuming perfect month to year correlation, a +1 normalized month (3.19%) would produce a +1 normalized year (22.12%). I experimented with several approaches, but the most demonstration friendly version was to allow a hit/success for any month whose measurement was within one standard deviation

of the following year's performance. I then measured how many of the 62 years in the database were each month's performance a success in relation to the following year. A subset (1995-2008) of the January results is listed below. The results look modestly similar to the Same Sign results, but note; in 1998, both January and the forward year were positive, but were assigned a miss/failure (0) because the 30.54% annual return far exceeded what would be expected from a 1.02% January. Conversely, in 1999, we received a very strong 4.10% January and a very normal 8.97% return over the next 12 months, which was also recorded as a miss, since a much stronger follow through should have been anticipated, if there was a measurable correlation.

NORM	NORMALIZED CORRELATION EXAMPLE FOR JAN 1995-2008								
YEAR	SP% JAN	NEXT YR%		IALIZED NXTYR%	WITHIN ONE STANDRD DVTN				
1998	1.02	30.54	0.09	1.27	0				
1999	4.10	8.97	1.03	0.02	0				
2000	-5.09	-2.04	-1.35	-0.80	1				
2001	3.45	-17.26	0.85	-1.39	0				
2002	-1.56	-24.29	-0.71	-1.57	1				
2003	-2.74	32.19	-1.04	1.32	0				
2004	1.73	4.43	0.31	-0.32	1				
2005	-2.53	8.36	-1.01	-0.02	1				
2006	2.56	12.36	0.58	0.27	1				
2007	1.41	-4.15	0.21	-0.95	0				
2008	-6.12	-40.09	-1.46	-1.90	1				

In the table below, I have updated the monthly SAMESIGN statistics table with an additional column which shows the percent of years that each month's S&P move was within one standard deviation of the following year's move. January again was at the top of list with June making a much better showing via this calculation.

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THE PROBABILITY OF ANY GIVEN MONTH'S DIRECTION MATCHING THE NEXT YEAR'S DIRECTION						
MONTH	SAMESIGN DIRECTION	ONE STANDARD DEVIATION				
JAN	70.97%	62.90%				
FEB	54.52	58.06				
MAR	56.45	53.23				
APR	66.13	61.29				
MAY	58.06	51.61				
JUN	54.84	62.90				
JUL	54.84	46.77				
AUG	50.00	53.23				
SEP	51.61	59.68				
OCT	50.00	45.16				
NOV	56.45	56.45				
DEC	58.06	50.06				

The Month to Year Correlation Coefficient Comparison

A third measure of interest is each of the twelve month's correlation coefficient to the following year's performance. Recall from Statistics 101, that a correlation coefficient represents the quality of the linear relation between two sets of data. A value of +1 represents a perfect fit, while a value of -1 represents a perfect negative correlation. If there is no correlation, the coefficient should hover close to zero. If there was a strong correlation between a particular month's performance and the following year's move, we would expect to see the correlation coefficient gravitate toward a value of +1.

Since I desire that you stick around for the rest of the movie, I will pass on the temptation to use the unused bottom half of this page to provide you with the mathematical equation used to calculate the Pearson Correlation Coefficient. You know how to google, and besides most modern day graphing calculators will provide the correlation coefficient between any two sets of data. Utilizing the Pearson Correlation Coefficient equation, January and April again come in first and second although, admittedly, reflecting much less correlation than most barometer enthusiast would care to acknowledge. I have added a third column to our previous table of correlation results with each month's Pearson Correlation Coefficient added. The AVERAGE column is the average of the three correlation measures in the first three columns. You may have noticed that averaging the three measurements required converting the standard Pearson Correlation Coefficient measure from '-1 to +1' to '0 to 100'. Green = First, Blue = Second

SUI	SUMMARY OF MONTH TO YEAR CORRELATION MEASURES								
МТ	SAMESIGN	NORMALIZED	PEARSONCC	AVERAGE	RANK				
JAN	<mark>70.97</mark>	<mark>62.90</mark>	<mark>0.246</mark>	<mark>65.39</mark>	1				
FEB	64.52	58.06	0.078	58.83	3				
MAR	56.45	53.23	133	51.01	9				
APR	66.13	61.29	0.166	61.85	2				
MAY	58.06	51.61	003	53.17	6				
JUN	54.84	<mark>62.90</mark>	0.062	56.94	4				
JUL	54.84	46.77	013	50.32	10				
AUG	50.00	53.23	144	49.18	12				
SEP	51.61	59.68	059	52.78	7				
OCT	50.00	45.16	0.062	49.43	11				
NOV	56.45	56.45	0.119	56.28	5				
DEC	58.06	50.00	-0.041	52.00	8				

Month to Year Correlation Study Summary

Based on the above analysis, there is substantial evidence supporting the explanation for January's popularity as the calendar month Barometer of choice, as it ranked first in each of the three measures we have examined.

I was disappointed to discover that none of the twelve calendar months carried more than a 0.21% correlation coefficient vs the corresponding 12 month move, nor was able to predict the direction of the following year with more than 70% accuracy.

This desire for higher accuracy brings us to the crux of this seasonal analysis study. Could we find a better barometer, if we were not constrained to calendar 'month' analysis? For example, what about midmonth periods such as December 15 through January 15? And if we are going to burden the computer with the task of scanning all 365 potential months in a year, why not take an extra second and search for all time periods of all time lengths?

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Introducing the TOY Barometer

I set up a scan to look at every time period in the 365 day calendar, in time intervals of from seven to 90 days (week to quarter). This resulted in a scan of 30,295 different time periods in an effort to determine which one had the best record of forecasting the nature of the next twelve months move. I chose as my measure of effectiveness (MOE), the average of the Samesign, Normalized Hits, and Pearson Correlation Coefficient approaches, which I have introduced above. The time period, which this exercise determined to have the highest correlation to the following year, was the two month period from November 19 to January 19. Since this two month time period (Nov19-Jan19) extends across the Turn of the Year (TOY) and encompasses the gift giving season, I have coined it the 'TOY Barometer'. Below is a comparison of the one year forecasting record of the month of January versus the TOY period via the three correlation measures, I have previously introduced. The TOY Barometer showed improvement in all three measurements and accurately forecast the direction of the following year's S&P move in 80.65% of the 62 years evaluated from 1950 through 2011, a marked improvement over the January Barometer's 71% success rate.

THE JANUARY AND TOY BAROMETER COMPARISON							
BAROMETER	SAMESIGN	NORMALIZED	PEARSONCC	AVERAGE			
JANUARY	70.97	62.90	0.246	65.39			
TOY	80.65	67.74	0.391	72.65			

The TOY Barometer's predictive ability benefits from the fact it's setup period includes several subset time frames which have, in their own right, shown predictive capability; such as the Thanksgiving Holiday week, the Christmas Holiday week, the last week of the year and the first week of the year. Also, many an investment methodology involves turn of the year contributions which may tip the market's hand as to levels of money flow which may potentially ensue over the course of the year and contribute to both the TOY and January Barometer's successful track record. <u>Since 1950, the S&P has finished positive in the following TOY year</u> (Jan19-Jan19) in 31 of those 32 years in which TOY performance (Nov19-Jan19) exceeded 3%. In the 1987 exception, the S&P was up 24% from January 19 through August 13, before succumbing to an assault on double digit interest rates during the fall of that, the year of our beloved Black Monday. The 32 previous +3% TOY cases are listed below.

ONE	YEAR (JAN19-JA	N19) S&P P	ERFOR	MANC	E AFTER	A +3% TOY	
# 1 2 3 4 5 6 7 8 9 10 11	YEAR 1950 1951 1952 1954 1955 1958 1959 1961 1963 1964	TOY% 4.26 7.55 6.69 5.25 4.51 3.24 4.66 7.08 8.96 6.48 5.61	NEXTYR% 27.89 13.08 10.17 44.51 33.36 35.79 8.78 21.72 17.67 12.98 13.75	# 17 18 19 20 21 22 23 24 25 26 27	YEAR 1980 1983 1985 1986 1987 1988 1989 1991 1992 1997 1999	TOY% 6.56 6.02 5.50 4.91 13.33 3.86 7.67 4.04 10.39 4.58 8.53	NEXTYR% 20.98 14.99 21.66 29.22 -7.43 15.08 18.21 26.08 3.88 23.88 16.39	
13 14 15	1972 1975 1976	13.39 4.05	12.16 15.56 38.56 5.62 11.35	29 30 31 32	2009 2010	5.40 5.05 6.85 8.13	11.45 2.54	
NEXT	NEXT YEAR #UP-DN= 31-1 AVG%CHG=16.67 MED%CHG=15.01							

	S&P PERFORMANCE AFTER A +3% TOY									
#	YR	TOY%						MAXII DRWDN		
1	1972	13.39	-1.33	1.35	5.12	2.18	14.34	-1.49	15.56	
2	1987	13.33	0.10	6.03	6.52	16.80	-7.43	-15.91	26.47	
3	1971	13.09	1.95	3.18	10.93	5.51	10.79	-3.48	12.16	
4	1992	10.39	-0.81	-1.52	-0.67	-0.77	3.88	-5.67	5.52	
5	2004	9.34	1.36	0.52	-0.46	-3.37	3.93	-6.08	7.20	
6	1976	9.27	1.38	3.14	3.17	6.07	5.62	0.00	11.16	
7	1963	8.96	1.14	2.06	5.69	5.08	17.46	-1.58	17.67	
8	1999	8.53	0.11	-0.94	3.09	12.53	16.39	-2.18	18.18	
9 :	2012	8.13	0.30	3.55	4.75	4.72	13.05	-2.29	13.27	
10	1989	7.67					18.21			
11	1951	7.55	-0.47	2.20	3.18	2.25	13.53	-2.06	13.08	
12	1961	7.08	1.42	3.90	10.11	8.25	15.02	0.00	21.72	
13	2011		1.15						5.30	
14	1952	6.69	1.24	-2.10	-3.09	2.47	7.26	-4.59	10.17	
15	1980	6.56	2.29	3.91	-9.47	9.88	20.98	-11.27	26.94	
16	1964	6.48	0.72	1.18	5.21	9.73	13.15	-0.18	12.98	
17	1983	6.02	-2.57	1.88	9.25	13.46	14.99	-4.38	17.95	
18	1979	5.64	2.12	-1.08	1.53	1.86	11.35	-3.60	11.58	
19	1967	5.61	-0.01	2.41	7.13	9.12	10.98	0.00	13.75	
20	2009	5.40	-1.59	-2.74	1.79	10.66	35.30	-19.85	36.07	
21	1954	5.25					36.14		44.51	
22	2010	5.05	-5.05	-3.57	4.11	-6.87	11.45	-9.99	14.00	
23	1985	5.05	3.52	6.00	5.56	13.46	21.66	0.00	25.23	
24	1986		-0.96						27.30	
25	1959	4.66	0.16						8.78	
26	1997	4.58	-0.73	4.16	-1.94	20.03	23.88	-4.17	27.81	
27	1955	4.51	2.83	5.52	9.32	20.42	25.06	0.00	33.36	
28	1950	4.46	-0.83	1.66	6.99	2.90	26.62	-1.01	27.89	
29	1975	4.05	2.85	14.85	22.96	31.95	38.56	-1.87	34.81	
30	1991	4.04	1.16	11.09	16.93	15.99	26.08	0.00	28.30	
31	1988	3.86	0.10	4.93	3.45	7.68	15.08	-3.67	13.76	
32	1958	3.24	1.48	0.02	2.80	10.83	35.47	-1.10	35.97	
	#UP-	-DN =	22-10	25- 7	27- 5	29- 3	31- 1			
	AVG	CHG=	0.51	2.68	5.38	9.05	16.67			
	MED 8	BCHG=	0.93	2.31	4.93	8.69	15.01			

The below table provides the detailed breakdown of the +3% TOY cases.

Drawdowns/Ups measured from signal date, not peak to trough

Bear Market TOYs

It occurred to me that most of the time frames which were grading out well under my measurements could possibly be riding strongly on their ability to forecast the positive years which comprised 75% of the post 1949 database. When I asked the computer to scan for the time period whose negative measures had the best record of forecasting down years only, the TOY time period gathered additional support, as it came back the winner in that search as well. Below are the detailed forward performance statistics for the 13 negative TOY cases.

	S&P PERFORMANCE AFTER A NEGATIVE TOY PERIOD										
			FOR	WARD	S&P PE	RFORM	ANCE	MAXI	MUM		
#	YR	TOY%	WK%	MT%	QTR%	6MT%	YR%	DRWDN	DRWUP		
1	1956	-4.00	-0.59	1.83	8.81	12.81	2.10	-2.40	12.38		
2	1957	-1.44	0.40	-2.64	1.72	8.71	-7.93	-13.80	8.65		
3	1962	-4.01	-0.90	2.41	-0.23	-17.93	-5.19	-23.50	3.90		
4	1969	-3.87	0.34	0.40	-1.23	-6.15	-12.13	-12.70	3.90		
5	1970	-6.52	-1.65	-2.11	-4.44	-13.34	4.58	-23.79	2.74		
6	1974	-5.11	1.12	-3.44	-0.82	-12.33	-25.74	-35.99	2.51		
7	1978	-5.50	-1.68	-2.36	4.18	8.91	10.72	-4.04	18.14		
8	1981	-3.37	-3.37	-5.78	0.25	-2.69	-13.69	-16.32	1.74		
9	1982	-3.93	-0.67	-2.37	0.63	-4.52	25.27	-12.63	25.21		
10	1990	-0.72	-3.94	-1.90	-0.31	7.72	-2.04	-12.63	9.10		
11	2001	-1.84	0.92	-3.06	-6.62	-9.50	-16.01	-28.35	1.91		
12	2002	-2.04	0.49	-2.08	-0.28	-21.82	-20.03	-31.80	2.76		
13	2008	-7.54	2.17	1.87	4.92	-4.87	-35.85	-43.56	7.00		
#t	JP-DN	=	6- 7	4- 9	6- 7	4-9	4-9				
A	VG%CH	G=	-0.57	-1.48	0.51	-4.23	-7.38				
MI	ED%CH(G=	-0.59	-2.11	-0.23	-4.87	-7.93				

Note from the Drawdown Statistics that 10 of the 12 negative TOYs experienced at least a 12.5% Drawdown at some point in the following year. Three of the negative TOY's experienced as least a 30% S&P decline at some point in the following 12 months, which brings us to the following observation. There have been three 50% Bear Markets since 1950 ranging from 16 to 31 months in duration. In none of those three cases, did a +3% TOY occur between the year preceding those three Bear markets and the final year of the eventual bottom and a negative TOY appeared in advance of the turbulent second half conclusions of all three.

TOY PERFORMANCE IN THE THREE 50% BEAR MARKETS									
BEAR MARKET TIME FRAME	SP%	PRE BEAR TOY	1ST YR TOY	2ND YR TOY					
01/11/1973 - 10/03/1974	-48.15	1973=2.85	1974=-5.11	N/A					
03/24/2000 - 10/09/2002	-49.14	2000=2.38	2001=-1.84	2002=-2.04					
11/19/2007 - 03/09/2009	-56.68	2007=2.09	2008 =-7.54	N/A					

Note to Self: Beware of small TOYs (2-3ish) followed by negative TOYs

S&P PERFORMANCE VS JANUARY PERFORMANCE										
CATEGORY		WEEK	MONTH	QTR	6MTS	12MTS				
AFTER A	#UP-DN =	0.65	12- 6	17- 1	17- 1	17- 1				
+4%	AVG%CHG=		1.01	4.69	9.38	15.44				
JANUARY	MED%CHG=		0.62	4.78	7.32	13.82				
AFTER A	#UP-DN =	0.41	12- 8	15- 5	14- 6	16- 4				
0 TO 4%	AVG%CHG=		0.30	2.87	3.91	10.21				
JANUARY	MED%CHG=		0.52	2.96	2.73	10.70				
AFTER A	#UP-DN =		9-15	13-11	12-12	13-11				
NEGATIVE	AVG%CHG=		-1.36	0.49	-0.76	1.25				
JANUARY	MED%CHG=		-1.92	0.52	0.44	3.28				

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The January vs TOY Barometer Comparison

	S&P PERFORMANCE VS TOY PERFORMANCE										
CATEGORY		WEEK	MONTH	QTR	6MTS	12MTS					
AFTER A 3% TOY	#UP-DN = AVG%CHG= MED%CHG=	0.52	26- 7 2.65 2.20	28- 5 5.27 4.75	30- 3 8.83 8.25	32- 1 16.67 15.01					
AFTER A 0-3% TOY	#UP-DN = AVG%CHG= MED%CHG=		-		9- 9 1.66 0.32	11- 7 5.51 3.46					
AFTER A NEGATIVE TOY	#UP-DN = AVG%CHG= MED%CHG=										

The significant differences in the January and TOY Barometer are

- 1. The TOY Barometer's production of 33 signals in the superior (90% accurate) category vs 18 for the January Barometer and,
- 2. TOY's ability to give guidance in avoiding Bear Market years. The S&P was down the following year after nine of the 13 negative Toys. From the January 19 signal date, the S&P experienced at least a 12.5% one year drawdown after 11 of the 13 Negative TOY periods. The January Barometer was followed by positive years after 13 of the 24 negative January Barometer signals.

With the conclusion of the TOY Story, this study presentation of 21st century style seasonal barometers could appropriately come to a conclusion. But given I have titled this paper 'A Red Ryder Christmas', I feel obligated and compelled to provide you with at least one more seasonal barometer statistic, one which I feel confident you will find a definite stocking stuffer.

A Red Ryder Christmas

The holiday classic 'The Christmas Story' chronicles a year in the life of Ralphie, a young eight year old boy, who is having a tough go of it. He is struggling in school, bullied by the neighborhood boys, and subjected to periodic soap cleansings of the mouth by his mother. But the story concludes with Ralphie's receipt of his childhood dream for Christmas, a Red Ryder BB gun. The Red Ryder Christmas Signal parallels Ralphie's journey to Nirvana as the market must also first experience a poor year, but conclude with the appearance of a once in a childhood Holiday setup scenario. Define:

The TOY Period = S&P 500 Percent Change from Nov 19 to January 19 A TOY Year = S&P 500 Percent Change from Jan 19 to January 19

Note the TOY period is the last two months of the TOY year.

A Red Ryder TOY Signal occurs when a Negative TOY year (Jan19-Jan19) concludes with a positive TOY Period (Nov19-Jan19).

	THE TEN RED RYDER TOY SIGNALS										
YEAR		NOV19-JAN19 TOY%	NEXTYRS TOYYR%	MAXI DRAWDN	_						
1954 1958 1963 1967 1975 1988 1991 1995 2003 2009	-1.27 -7.93 -5.19 -8.40 -25.74 -7.43 -2.04 -1.55 -20.03 -35.85	5.25 3.24 8.96 5.61 4.05 3.86 4.04 1.19 0.56 5.40	36.14 35.47 17.46 10.98 38.56 15.08 26.08 31.03 26.40 35.30	$\begin{array}{c} 0.00 \\ -1.10 \\ -1.58 \\ 0.00 \\ -1.87 \\ -3.67 \\ 0.00 \\ -1.05 \\ -12.45 \\ -19.85 \end{array}$	35.97 17.67 13.75 34.81 12.81 28.30 32.36 24.63						
	#UP-DN = 10- 0 AVG%CHG= 27.25 MED%CHG= 28.71										

Although only ten signals over 62 years,

- **1.** It caught five of the six +30% TOY years over that time frame.
- 2. All ten signals were followed by a +10% TOY year, with a gaudy average/median return of 27.25/28.71%.
- 3. Seven of the ten cases experienced less than a 2% one year drawdown from the January 19 signal date, with three uncannily experiencing no drawdown at all.

Wayne's Intermediate Time Frame Seasonal Model

My intermediate Seasonal Model is based on the following design. The first of the three components is based on the outcome of the TOY period (November19-January19) each year.

WAYNE'S TOY SETUP RATINGS									
TOY SCENARIO	#YRSUP-DN	AVG%CHG	MED%CHG	RATING					
Negative 0-3% Greater than 3% A Red Ryder Setup	4- 9 11- 7 32- 1 10- 0	-7.38 5.51 16.67 27.25	-7.93 3.46 15.01 28.21	-1 0 +1 +2					

A Red Ryder setup occurs when a negative TOY Year (Jan19-Jan19) concludes with a positive TOY Period (Nov19-Jan19). Kudos to the statisticians in the audience who note that the four categories are not mutually exclusive, as the ten Red Ryder cases come from the previous two positive TOY categories. The Red Ryder setup takes precedent over an occurrence of any of the previous TOY categories and receives a +2 rating.

The second component of the intermediate seasonal model is the addition of a rating based on my version of the 'Sell in May and Go Away' philosophy. From 1950 through 2012, I have the Oct 27 – May 5 time frame, up an average of 8.54% and the average May 5 – Oct 27 time frame down 0.04%, suggesting that all the year's annual gains over the last 63 years have been accrued, on average, between October 27 and May 5. Any day between October 28 and April 20 gets a 'Sell in May' rating of +1 and a zero, otherwise. See Addendum 2 for a 63 year breakdown and detailed analysis of my version of the 'Sell in May' strategy, along with some observations you haven't seen before.

WAYNE'S SELL IN MAY AND GO AWAY RATINGS							
TIME FRAME AVGANN%CHG RATING							
May5-October27	-0.04%	0					
October27-May5	8.54%	+1					

Thirdly, the average annual return in PreElection Years is 13.44% and 4.96%, in the remaining three years of the four year election cycle. The model gives each day an Election Cycle Rating of +1, if it occurs in a PreElection Year and a 0 otherwise. The PreElection Story details are included in Addendum 3.

WAYNE'S ELECTION CYCLE RATINGS							
YEAR AVGANN%CHG RATING							
NonPreElection	4.96	0					
PreElection	13.44	+1					

Combining the 'Sell in May' and 'Election Cycle' ratings with the 'Toy Scenario' ratings yields an Intermediate Seasonal Model which varies in rating from -1 to +4 and has produced the below post 1949 annualized S&P returns as a function of those five levels.

WAYNE'S SEASONAL MODEL PERFORMANCE SUMMARY									
SEASONAL RATING	NUMBER OF YEARS	AVERAGE ANNUAL%CHG							
-1	6.29	-19.85							
0	11.62	2.98							
1	15.58	7.10							
2	17.20	12.14							
3	9.55	28.09							
4	2.90	37.04							

Wayne's Seasonal Model Trading Performance

I would not suggest a portfolio's market exposure be managed solely upon seasonal influences. A well researched exposure model should arguably consist of some mix of seasonal, tape, interest rate factors, sentiment, economic and valuation systems. However, the seasonal model I have introduced is an excellent start on building such a system. Below are the annual return statistics for two different exposure approaches. The first approach is unleveraged, with Long exposure levels from 0 to 100% depending on the seasonal model ranking. The second approach allows modest (50%) short exposure and up to two times leverage on the Long side. Cash exposure was allowed to draw the prevailing 3 month Tbill rate at that point in time. The leveraged model was positive in 90.5% of years for an average annual return of 16.49%..

RAT SP EXI		PERFORMANCE STATISTIC		B&H S&P	UNLEV- ERAGED	LEVE- RAGED
-1 0.00 0 0.25 1 0.50 2 0.75 3 1.00 4 1.00	0.0 0.5	PCT OF UP YEARS AVG YRLY % CHG MAX DRAWDOWN AVG DAILY VOLAT BETA TO S&P RISK ADJ ALPHA	= = = =	73.02 8.71 -56.78 0.659 1.00 0.00	87.30 11.09 -26.34 0.358 0.543 11.69	90.48 16.49 -35.12 0.492 0.747 13.38

YEAR	S&P%	UNL%	LEV%	YEAR	S&P%	UNL%	LEV%
1950	21.90	15.23	18.80	1982	14.76	9.73	0.53
1951	16.35	16.08	24.05	1983	17.27	16.95	22.80
1952	11.78	9.02	11.35	1984	1.40	3.91	2.03
1953	-6.62	-1.80	-1.28	1985	26.33	21.24	25.87
1954	45.02	38.26	57.95	1986	14.62	13.32	16.09
1955	26.40	23.32	30.73	1987	2.03	9.45	13.81
1956	2.62	1.16	-1.97	1988	12.40	13.17	17.72
1957	-14.31	2.44	9.22	1989	27.25	21.94	26.46
1958	38.06	30.41	43.74	1990	-6.56	4.55	4.09
1959	8.48	9.14	13.42	1991	26.31	26.78	56.12
1960	-2.97	-0.54	-1.18	1992	4.46	4.51	5.03
1961	23.13	17.20	22.22	1993	7.06	4.11	3.13
1962	-11.81	1.53	5.82	1994	-1.54	1.19	0.90
1963	18.89	17.19	29.52	1995	34.11	33.84	67.69
1964	12.97	10.17	12.51	1996	20.26	10.58	9.06
1965	9.06	7.52	8.46	1997	31.01	22.15	26.44
1966	-13.09	-1.36	1.62	1998	26.67	17.94	19.82
1967	20.09	18.11	33.60	1999	19.53	20.98	31.07
1968	7.66	3.99	1.59	2000	-10.13	-0.94	-0.17
1969	-11.36	3.85	6.95	2001	-13.05	4.04	11.17
1970	0.10	4.40	1.50	2002	-23.37	-0.90	7.98
1971	10.79	13.78	21.14	2003	26.38	24.88	44.17
1972	15.63	12.07	14.44	2004	8.99	7.89	10.37
1973	-17.37	-4.96	-4.35	2005	2.98	3.42	3.58
1974	-29.72	4.14	18.02	2006	13.65	9.08	8.84
1975	31.55	28.68	60.12	2007	3.53	4.09	3.79
1976	19.15	18.65	26.23	2008	-38.49	-0.76	18.23
1977	-11.50	-1.93	-0.46	2009	23.45	29.54	47.52
1978	1.06	5.64	3.18	2010	12.78	10.07	13.45
1979	12.31	11.18	13.28	2011	0.00	1.05	0.76
1980	25.77	17.69	16.17	2012	13.41	9.70	12.68
1981	-9.73	10.63	11.25				

The Leveraged and Unleveraged Seasonal Model's Annual Returns

Summary

1. Based on three different statistical measures examined, January is the most reliable of the twelve calendar months in forecasting the direction of the subsequent twelve months, but its ability to provide guidance in sidestepping negative years is negligible.

2. If one does not constrain one's seasonal barometer selection solely to the twelve calendar months, or for that matter, monthly time periods at all, the time period from November 19 through January 19 has a superior record to the traditional January Barometer in forecasting the prospects for the S&P's next twelve months. This time period, which I have labeled the TOY (Turn of Year) period, yields measurably better results predicting negative years, than does the January Barometer with the 13 observed negative TOY periods being followed by negative years in nine of those 13 cases. Eleven of those 13 negative TOYs experienced a 12.5% drawdown from the signal date at some point during the following year.

- 3. In a special Red Ryder TOY setup case, if a negative TOY Year (January 19 – January 19), concludes with a positive TOY period (November 19 – January 19), the following TOY year has been up at least 10% in all ten occasions this setup has developed since 1950 and has caught five of the six +30% years, with an impressive ten signal average/median annual return of 27.25/28.71.
- 4. Although not mentioned in this paper, the top dozen time frames identified in the scan for the top seasonal barometer period of the year all came from the mid November through mid February time frame. For example, November 19 – February 5[,] was a close second place. I did not find any other time periods outside of this three month turn of year period which produced similar results.
- 5. The seasonal model, which I have introduced, has a very appealing track record, but there are time frames, such as the fall of 87, where one would also be well served to draw from other market influences such as tape, interest rate influences, sentiment, economic and valuation systems. A subject we will address in more detail, tomorrow.

Addendum 1. The January Barometer – The Detailed Breakdown

	S&P PERFORMANCE AFTER A +4% JANUARY								
	FORWARD S&P PERFORMANCE							MAXIMUM	
#	YEAR	JAN%	WEEK%	MNTH%	QTR%	6MTS%	12MT%	DRWDWN	DRAWUP
1	1951	6.02	1.52	0.65	3.55	3.42	11.45	-3.23	13.85
2	1954	5.12	0.84	0.27	8.36	18.40	40.45	-1.04	40.91
3	1958	4.28	0.07	-2.06	4.17	13.17	32.97	-2.61	34.39
4	1961	6.32	-0.21	2.69	5.71	8.06	11.43	-1.04	17.58
5	1963	4.91	-0.05	-2.89	5.44	4.43	16.37	-3.17	16.48
6	1967	7.82	0.39	0.20	8.54	9.40	6.50	-0.21	12.68
7	1971	4.05	1.10	0.91	8.42	-0.31	8.41	-5.97	9.27
8	1975	12.28	2.14	5.99	13.41	15.29	31.02	0.00	31.02
9	1976	11.83	-1.39	-1.14	0.77	2.56	1.16	-2.21	6.91
10	1980	5.76	1.86	-0.44	-6.89	6.58	13.48	-13.96	23.09
11	1985	7.41	1.22	0.86	0.11	6.29	17.90	-1.73	19.02
12	1987	13.18	2.17	3.69	5.21	16.27	-6.21	-18.30	22.87
13	1988	4.04	-2.38	4.18	1.66	5.82	15.72	-3.10	15.72
14	1989	7.11	0.73	-2.89	4.09	16.34	10.63	-3.48	20.95
15	1991	4.15	3.66	6.73	9.14	12.76	18.86	-0.26	22.34
16	1997	6.13	0.43	0.59	1.93	21.39	24.69	-6.17	25.35
17	1999	4.10	-3.14	-3.23	4.34	3.84	8.97	-4.96	14.82
18	2012	4.36	2.64	4.06	6.51	5.10	14.15	-2.62	14.89
	J#	JP-DN =	13- 5	12- 6	17- 1	17- 1	17- 1		
	A۱	/G%CHG=	0.65	1.01	4.69	9.38	15.44		
	ME	ED%CHG=	0.78	0.62	4.78	7.32	13.82		

	S&P PERFORMANCE AFTER A 0 TO +4% JANUARY								
			FORWARD S&P PERFORMANCE				MAXIMUM		
#	YEAR	JAN%	WEEK%	MNTH%	QTR%	6MTS%	12MT%	DRWDWN	DRAWUP
1	1952	1.56	-0.12	-3.65	-3.40	5.22	9.28	-4.35	10.44
2	1955	1.81	0.90	0.35	3.63	18.81	19.63	-4.56	26.70
3	1959	0.43	-1.95	-0.07	3.86	9.13	0.29	-3.37	9.49
4	1964	2.69	0.18	0.99	3.14	7.97	13.66	-0.38	13.66
5	1965	3.32	-0.31	-0.15	1.77	-2.64	6.08	-6.81	7.30
6	1966	0.49	0.76	-1.79	-1.96	-9.99	-6.75	-21.19	1.27
7	1972	1.81	0.58	2.53	3.59	3.32	11.63	0.00	15.68
8	1979	3.97	-2.77	-3.65	1.83	3.88	14.24	-3.80	15.28
9	1983	3.31	1.12	1.89	13.17	11.88	12.46	-1.61	18.82
10	1986	0.24	1.31	7.15	11.21	11.49	29.42	0.00	30.04
11	1993	0.70	2.31	1.05	0.32	2.13	9.76	-1.57	9.76
12	1994	3.25	-2.05	-3.00	-6.37	-4.85	-2.32	-8.86	0.08
13	1995	2.43	2.21	3.61	9.41	19.48	35.20	0.00	35.20
14	1996	3.26	2.19	0.69	2.85	0.62	23.61	-1.47	23.62
15	1998	1.02	3.27	7.04	13.42	14.32	30.54	-2.32	30.54
16	2001	3.45	-1.84	-9.23	-8.53	-11.33	-17.26	-29.30	0.54
17	2004	1.73	1.03	1.22	-2.11	-2.60	4.43	-6.00	7.29
18	2006	2.56	-1.98	0.05	2.39	-0.27	12.36	-4.41	12.50
19	2007	1.41	0.82	-2.19	3.07	1.18	-4.15	-8.88	8.82
20	2011	2.26	2.56	3.20	6.03	0.48	2.04	-14.53	6.03
	#U	P-DN =	13- 7	12- 8	15- 5	14- 6	16- 4		
	AV	G%CHG=	0.41	0.30	2.87	3.91	10.21		
	MED%CHG=		0.79	0.52	2.96	2.73	10.70		

	S&P PERFORMANCE AFTER A NEGATIVE JANUARY								
		FORWARD S&P PERFORMANCE						MAXIMUM	
#	YEAR	JAN%	WEEK%	MNTH%	QTR%	6MTS%	12MT%	DRWDWN	DRAWUP
1	1953	-0.72	0.49	-1.82	-6.67	-6.18	-1.14	-13.91	0.61
2	1956	-3.65	1.78	3.47	10.41	12.71	2.05	-0.91	13.28
3	1957	-4.18	-2.46	-3.26	2.28	7.13	-6.75	-12.84	9.86
4	1960	-7.15	0.67	0.92	-2.23	-0.18	11.10	-6.13	11.44
5	1962	-3.79	2.30	1.63	-5.23	-15.41	-3.83	-24.00	3.22
6	1968	-4.38	-0.20	-3.12	5.66	5.96	11.68	-4.90	17.49
7	1969	-0.82	0.50	-4.74	0.66	-10.85	-17.46	-17.46	3.06
8	1970	-7.65	1.54	5.27	-4.12	-8.20	12.77	-18.50	12.77
9	1973	-1.71	-2.04	-3.75	-7.81	-6.73	-16.77	-20.57	0.65
10	1974	-1.00	-3.39	-0.36	-6.48	-17.87	-20.29	-35.51	3.28
11	1977	-5.05	-0.14	-2.17	-3.52	-3.12	-12.53	-13.18	0.50
12	1978	-6.15	1.21	-2.48	8.49	12.81	11.97	-2.63	19.88
13	1981	-4.57	0.81	1.33	2.52	1.06	-7.06	-12.95	5.84
14	1982	-1.75	-2.61	-6.05	-3.29	-11.05	20.68	-14.94	21.90
15	1984	-0.92	-2.86	-3.89	-2.06	-7.80	9.93	-9.54	9.93
16	1990	-6.88	1.42	0.85	0.52	8.23	4.51	-10.22	12.12
17	1992	-1.99	0.56	0.96	1.51	3.77	7.34	-3.50	7.95
18	2000	-5.09	2.05	-2.01	4.16	2.61	-2.04	-9.30	9.54
19	2002	-1.56	-4.43	-2.08	-4.71	-19.34	-24.29	-31.27	3.55
20	2003	-2.74	-3.04	-1.70	7.15	15.73	32.19	-6.42	35.02
21	2005	-2.53	1.73	1.89	-2.07	4.48	8.36	-3.71	9.56
22	2008	-6.12	-3.02		0.51	-8.06	-40.09	-45.42	3.49
23	2009	-8.57	5.17	-10.99	5.68	19.57	30.03	-18.08	39.27
24	2010	-3.70	-0.71	2.85	10.51	2.58	19.76	-4.78	21.01
	#t	JP-DN =	13-11	9-15	13-11	12-12	13-11		
		/G%CHG=	-0.19	-1.36	0.49	-0.76	1.25		
		ED%CHG=	0.50	-1.92	0.52	0.44	3.28		

Addendum 2. Wayne's Version of the 'Sell in May and Go Away' Story

The traditional 'Sell in May and Go Away' philosophy suggest one should be long November through April and in the safe confines of Cash during the complimentary six months of May-October. I have found I can squeeze a few more pennies out of the process by being long both turns of the month at the transition points. Long from Oct 27 through May 5th and in cash the remainder of the time. This allows an investor to pocket all of the average annual returns since 1950, and put their money to other uses during the remaining 5 1/2 months of the year.

S&P RETURNS FOR OCTOBER 27-MAY 5 VS MAY 5-OCTOBER 27								
YEAR	OCT27MAY5	5 MAY50CT27	YEAR	OCT27MAY	5 MAY50CT27			
1950	12.82	8.51	1981	1.91	-8.46			
1951	15.17	0.18	1982	-1.36	14.97			
1952	3.73	1.82	1983	21.42	0.35			
1953	3.90	-3.08	1984	-3.48	3.88			
1954	16.61	13.18	1985	8.95	4.13			
1955	18.11	11.95	1986	26.78	0.44			
1956	14.57	-4.62	1987	23.69	-21.04			
1957	0.15	-12.41	1988	10.98	7.14			
1958	7.88	15.14	1989	10.94	8.92			
1959	14.54	-0.57	1990	0.99	-9.95			
1960	-4.46	-2.26	1991	24.97	0.89			
1961	24.06	2.74	1992	8.50	0.40			
1962	-3.07	-17.66	1993	6.22	4.52			
1963	28.40	5.68	1994	-2.85	3.21			
1964	9.28	5.09	1995	11.65	11.46			
1965	5.54	3.12	1996	10.68	9.24			
1966	-4.95	-8.76	1997	18.46	5.62			
1967	17.71	0.55	1998	27.21	-4.51			
1968	3.90	5.62	1999	26.47	-3.76			
1969	0.16	-6.13	2000	10.48	-3.70			
1970	-19.77	5.75	2001	-8.19	-12.79			
1971	24.86	-9.63	2002	-2.85	-16.35			
1972	13.69	3.74	2003	3.22	11.29			
1973	0.34	0.34	2004	8.77	0.35			
1974	-18.04	-23.19	2005	4.20	0.53			
1975	28.47	-0.39	2006	12.46	3.89			
1976	12.43	0.87	2007	9.31	1.97			
1977	-1.62	-7.76	2008	-8.32	-39.69			
1978	4.54	-2.01	2009	6.46	17.66			
1979	6.45	-0.12	2010	9.64	1.42			
1980	5.78	20.21	2011	12.91				
			2012	6.58	3.13			
			#UP-DN =	= 51-12	39-24			
			AVG%CHG=		-0.04			
			MED%CHG=	= 8.77	0.55			

On the 12 rare occasions, when the Oct27-May05 time frames were uncharacteristically negative, the following May5-Oct27 time frame was 4-8 for an average loss of 8.26%. Of those 15 occasions when the May5-Oct27 time frame was up at least 5%, the following Oct27-May5 time frame was 16-0 for an average gain of 11.57%.

Addendum 3. 2013 Election Cycle Analysis

It is a well documented phenomenon that equities tend to perform better in the second half of the four year election cycle than in the first two years, particularly the PreElection Year, which has shown a profit in 18 of those 21 years since 1930, for an average/median gain of 13.44/17.27%. Some have been brave enough to venture that there are political shenanigans contributing to such peculiarities. Since we only get one data point each four years, I extended this study back to the extent of my S&P database (1930).

POST ELECTION	MID ELECTION	PRE ELECTION	ELECTION YEAR	
YEAR PCTCH	YEAR PCTCH	YEAR PCTCH	YEAR PCTCH	
	1930 -27.57	1931 -47.07	1932 -15.15	
1933 46.59	1934 -5.94	1935 41.37	1936 27.92	
1937 -38.59	1938 25.21	1939 -5.45	1940 -15.29	
1941 -17.86	1942 12.43	1943 19.45	1944 13.80	
1945 30.72	1946 -11.87	1947 0.00	1948 -0.65	
1949 10.26	1950 21.90	1951 16.35	1952 11.78	
1953 -6.62	1954 45.02	1955 26.40	1956 2.62	
1957 -14.31	1958 38.06	1959 8.48	1960 -2.97	
1961 23.13	1962 -11.81	1963 18.89	1964 12.97	
1965 9.06	1966 -13.09	1967 20.09	1968 7.66	
1969 -11.36	1970 0.10	1971 10.79	1972 15.63	
1973 -17.37	1974 -29.72	1975 31.55	1976 19.15	
1977 -11.50	1978 1.06	1979 12.31	1980 25.77	
1981 -9.73	1982 14.76	1983 17.27	1984 1.40	
1985 26.33	1986 14.62	1987 2.03	1988 12.40	
1989 27.25	1990 -6.56	1991 26.31	1992 4.46	
1993 7.06	1994 -1.54	1995 34.11	1996 20.26	
1997 31.01	1998 26.67	1999 19.53	2000 -10.13	
2001 -13.05	2002 -23.37	2003 26.38	2004 8.99	
2005 2.98	2006 13.64	2007 3.53	2008 -38.49	
2009 23.45	2010 12.78	2011 0.00	2012 13.41	
#UP-DN = 11-9	#UP-DN = 12-9	#UP-DN =18- 3	#UP-DN = 15-6	
AVG%CHG= 4.87	AVG%CHG= 4.51	AVG%CHG=13.44	AVG%CHG= 5.50	
AVG%CHG= 5.02	MED%CHG= 1.06	MED%CHG=17.27	MED%CHG= 8.99	

And although, it is the general perception that Republican administrations are more business friendly than Democratic, for whatever reasons you care to postulate, post 1929 equity prices have prospered better under Democratic Administrations.

S&P ANNUAL PEFORMANCE VS PRESEDENTIAL PARTY							
PARTY	#UP-DN	%UP	AVG%	MED%			
DEMOCRATIC REPUBLICAN	31-13 25-14	70.5 64.1	10.30 3.51	12.61 3.53			

Addendum 4. The Wayne Whaley Story

Wayne Whaley, CTA, received a Masters Degree in Operations Research in 1981 from the Georgia Institute of Technology, where he received his first exposure to the mathematical modeling of probabilistic models. His education also focused on Optimization Theory, Time Series Analysis, Simulation Techniques and Game Theory. Wayne had little idea at the time where his applied mathematics background would lead him,



but even as a student, he had a special fondness for his Engineering Economics classes.

After college, Wayne migrated to Huntsville, AL, where he was employed from 1981-1993 as a system analyst for Teledyne Brown Engineering and Sparta Inc. Wayne honed his programming and analytical skills during the 80's 'Strategic Defense Initiative ' exercise by leading efforts to develop software that simulated the outcome of two sided nuclear force exchanges between the Soviet Union and the United States. Wayne's hobby during this time was the mathematical modeling of the stock market and he eventually joined Witter & Lester, a Huntsville, Alabama, based Commodity Trading Advisor (CTA), in 1993 as a research analyst with the intention of turning his hobby into a career.

Wayne became a partner at Witter & Lester in 1999. Although, he now trades the company's assets, he still considers himself to be the research department, with trading merely serving as the eventual report card for his research efforts. Mr. Whaley's forte is the implementation of his engineering background in the development of pattern recognition techniques, along with the ability to backtest multitudes of combinations of candidate market strategies. He currently utilizes a 20,000 line computer code that he has been developing over the last 15 years to aid him in his market decisions. The model relies predominantly on its ability to take an electronic snapshot each day of an indicator's characteristics, identifying all similar instances in the past, and summarizing the statistical results for the user.

Wayne has a fondness for spinning a tale and was the recipient of the 2010 Charles Dow Award from the Market Technicians Association for his research paper, '*Planes, Trains, & Automobiles, a Survey or Momentum Thrust Signals*', which is posted online. Wayne writes weekly market commentary and has been published in 'Technical Analysis of Stocks and Commodities', 'Futures Magazine', and referenced in Barron's. A Google of his name will produce many of his daily studies which have found their way into circulation on cyberspace.

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