Wayne's 'Sell in May' Essay

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There are legitimate reasons why the 'Sell in May and Go Away' trading philosophy is referenced ad nausea each spring, as it has been around the block many a decade and has a long and well tested track record of undeniable results.

The traditional thesis suggest one would be well served to be long equities from November through April and in the safe confines of, something akin to, Cash the remaining half of the year. Applying the trading strategy that it pays to be long through the turn of the months, I have found I can squeeze a few more pennies out of the process by being the title holder of the S&P through both turns of the end point months, starting on Oct 27 and ending on May 5. Since the start of 1950, an investor could have accrued every penny of the historical return of the S&P with 47.4% less market exposure, by only being in the market those 192 calendar days of the year.

I refer to 'Sell in May's opposite (Oct27-May5) time frame as the 'Buy in Fall, When the Ghouls Come to Call' period or 'Buy in Fall' for short. Since 1950, the 'Buy in Fall' period has averaged an 8.54% return. Adjusted to an annualized measure of reference, the 192 day 8.54% return equates to an average 16.23% annualized return. The 173 day 'Sell in May' period has averaged fractionally close to zero each year which, for those without a calculator, annualizes out to close to zero, as well.

S&P RETURNS FOR 'BUY IN FALL' VS 'SELL IN MAY'								
YEAR	OCT27MAY5	MAY50CT27	YEAR O	CT27MAY5	MAY50CT27			
1950	12.82	8.51	1984	-3.48	3.88			
1951	15.17	0.18	1985	8.95	4.13			
1952	3.73	1.82	1986	26.78	0.44			
1953	3.90	-3.08	1987	23.69	-21.04			
1954	16.61	13.18	1988	10.98	7.14			
1955	18.11	11.95	1989	10.94	8.92			
1956	14.57	-4.62	1990	0.99	-9.95			
1957	0.15	-12.41	1991	24.97	0.89			
1958	7.88	15.14	1992	8.50	0.40			
1959	14.54	-0.57	1993	6.22	4.52			
1960	-4.46	-2.26	1994	-2.85	3.21			
1961	24.06	2.74	1995	11.65	11.46			
1962	-3.07	-17.66	1996	10.68	9.24			
1963	28.40	5.68	1997	18.46	5.62			
1964	9.28	5.09	1998	27.21	-4.51			
1965	5.54	3.12	1999	26.47	-3.76			
1966	-4.95	-8.76	2000	10.48	-3.70			
1967	17.71	0.55	2001	-8.19	-12.79			
1968	3.90	5.62	2002	-2.85	-16.35			
1969	0.16	-6.13	2003	3.22	11.29			
1970	-19.77	5.75	2004	8.77	0.35			
1971	24.86	-9.63	2005	4.20	0.53			
1972	13.69	3.74	2006	12.46	3.89			
1973	0.34	0.34	2007	9.31	1.97			
1974	-18.04	-23.19	2008	-8.32	-39.69			
1975	28.47	-0.39	2009	6.46	17.66			
1976	12.43	0.87	2010	9.64	1.42			
1977	-1.62	-7.76	2011	12.91	-3.78			
1978	4.54	-2.01	2012	6.58	3.13			
1979	6.45	-0.12	<mark>2013</mark>	11.82**	?			
1980	5.78	20.21						
1981	1.91	-8.46	#UP-DN =	= 51-12	39-24			
1982	-1.36	14.97	AVG%CHG=	= 8.54	-0.04			
1983	21.42	0.35	MED%CHG=	= 8.77	0.55			

The 'Buy in Fall' vs 'Sell in May' Scorecard

** the 11.82 April 23, 2013 return is noted, but not included in the tally at the bottom of the table

'Buy in Fall' performance exceeded that of 'Sell in May' in 53 of the last 63 years.

In 28 (working on 29) of the post 1949 years, 'Buy in Fall' posted a double digit gain versus only eight such showings for the corresponding 'Sell in May' time frame.

The logical counter argument to the negative spin on 'Sell in May' is that the time period is curve fit, with insight into history that may not necessarily be indicative of the future. This point is acknowledged, but examination of the two time frames relative performance over each of the last six decades, points out the consistency of the differential between the two. Not only was 'Buy in Fall' superior in all six time periods, but the worse decade (70s) for 'Buy in Fall' performance (4.97%) was actually superior to the best decade (80's) for 'Sell in May' (3.05%).

SIX STRAIGHT DECADES OF 'BUY IN FALL' SUPERIORITY							
BUY IN FALL				SELL IN MAY			
DECADE	#UP-DN	AVG%	MED%	#UP-DN	AVG%	MED%	DECADE
1950s	10-0	10.75	13.68	6-4	3.01	1.00	1950s
1960s	7-3	7.66	4.72	6-4	-1.20	1.64	1960s
1970s	7-3	5.13	5.49	4-6	-3.24	-0.25	1970s
1980s	8-2	10.56	9.94	8-2	3.05	4.01	1980s
1990s	9-1	13.23	11.17	7-3	1.71	2.05	1990s
2000-12	10-3	4.97	6.58	8-5	-2.78	0.53	2000-12

Since I have space on this page, allow me to share one tangential observation. One of the tools many traders employ is based on the axiom of 'When the Market Goes Against the Trend, Go with the Market' and the 'Sell in May' statistics offer a great example of this trading philosophy. On the 12 rare occasions, when the normally strong 'Buy in Fall' time frames were uncharacteristically negative, the following 'Sell in May' time frame was 4-8 for an average loss of 8.26% (a 17.4% annualized loss). Of those 15 occasions when the normally benign 'Sell in May' time frame posted at least a 5% gain, the following 'Buy in Fall' time frame was 16-0 for an average gain of 11.57% (a 22.0% annualized gain). This has no implication this year, but merits mention in a detailed review of the 'Sell in May' phenomenon.

The 'Sell in May' Peak to Trough Drawdowns

YEAR	DRWDWN	YEAR	DRWDWN	YEAR	DRWDWN
1950	17.10	1971	9.40	1992	5.72
1951	12.12	1972	6.94	1993	6.45
1952	7.79	1973	9.79	1994	7.27
1953	9.38	1974	33.10	1995	12.10
1954	14.07	1975	14.14	1996	11.84
1955	18.98	1976	8.53	1997	17.04
1956	11.16	1977	10.60	1998	19.31
1957	20.66	1978	11.89	1999	12.08
1958	16.47	1979	11.87	2000	12.56
1959	9.17	1980	21.68	2001	26.43
1960	10.11	1981	15.75	2002	29.81
1961	5.92	1982	26.44	2003	12.41
1962	20.75	1983	7.80	2004	7.07
1963	8.26	1984	12.47	2005	7.31
1964	7.74	1985	8.00	2006	11.91
1965	11.79	1986	9.42	2007	10.12
1966	16.67	1987	33.24	2008	38.54
1967	9.39	1988	11.57	2009	19.90
1968	8.13	1989	15.18	2010	13.75
1969	15.71	1990	19.92	2011	19.01
1970	20.26	1991	7.08	2012	12.81
Avg Drawdown = 14.12% Median Drawdown = 12.08%					

Below is a table of the maximum 'Sell in May' Peak to Trough Drawdowns experienced during each of the post 1949 years.

Based on the trailing 63 year data sample, the expected Peak to Trough Drawdown is of the 14.12% variety.

In every one of the last 63 years, there was a Peak to Trough 'Sell in May' Drawdown of at least 5% at some point, and,

In two thirds (42) of the past 63 years, the 'Sell in May' time frame experienced at least a 10% drawdown at some point during it's 173 day window.

Annualized Returns for a Proposed 'Sell In May' Exposure Model

Wayne's Sell in May Model vs S&P 500 Buy and Hold								
YEAR	SELLMAY	S&P500		YEAR	SELLMAY	S&P500		
1950	12.77	21.90		1984	4.45	1.40		
1951	12.84	16.35		1985	20.97	26.33		
1952	8.72	11.78		1986	13.91	14.62		
1953	-2.54	-6.62		1987	18.79	2.03		
1954	24.87	45.02		1988	9.37	12.40		
1955	13.90	26.40		1989	19.69	27.25		
1956	5.43	2.62		1990	5.05	-6.56		
1957	-3.01	-14.31		1991	21.09	26.31		
1958	19.76	38.06		1992	4.89	4.46		
1959	8.50	8.48		1993	4.51	7.06		
1960	0.31	-2.97		1994	-0.53	-1.54		
1961	16.72	23.13		1995	21.34	34.11		
1962	0.68	-11.81		1996	13.01	20.26		
1963	11.83	18.89		1997	22.52	31.01		
1964	8.81	12.97		1998	25.56	26.67		
1965	7.19	9.06		1999	19.57	19.53		
1966	-3.34	-13.09		2000	-2.74	-10.13		
1967	16.86	20.09		2001	-0.56	-13.05		
1968	5.29	7.66		2002	-9.65	-23.37		
1969	-2.48	-11.36		2003	13.84	26.38		
1970	0.67	0.10		2004	7.34	8.99		
1971	16.21	10.79		2005	3.67	2.98		
1972	11.69	15.63		2006	10.65	13.64		
1973	-10.24	-17.37		2007	4.02	3.53		
1974	-8.62	-29.72		2008	-8.52	-38.49		
1975	26.89	31.55		2009	8.81	23.45		
1976	16.48	19.15		2010	9.07	12.78		
1977	-2.48	-11.50		2011	2.48	0.00		
1978	5.56	1.06		2012	8.43	13.41		
1979	13.63	12.31						
1980	14.18	25.77		#UP-DN =	51-12	46-17		
1981	4.07	-9.73		AVG%CHG=	8.71	8.69		
1982	9.15	14.76		MED%CHG=	8.81	11.78		
1983	17.57	17.27		MAXDRWDN	28.92	56.68		

In this model, we chose to be 75% Long the S&P during the 'Buy in Fall' period and 25% Long the S&P during the 'Sell in May' period. All cash earned the prevailing TBill rate on that day.

S&P Buy & Hold returns were matched with half the risk, resulting in the threes 50% Buy & Hold Drawdowns being reduced to a single 28.92% Drawdown incurred from Oct 31, 2007 through March 9, 2009.

Summary

Since the start of 1950, an investor could have accrued every penny of the historical return of the S&P with only 52.4% of the Buy and Hold equity risk, by only being in the market (S&P) from October 27 through May 5th as,

The S&P averaged an 8.54% return from October 27 through May 5, with a fractional (0.04%) loss during the complimentary period.

There were 28 (working on 29) positive double digit returns during the defined 'Buy in Fall' period, with only eight during the 'Sell in May' time frame.

The 'Buy in Fall' performance exceeded that of 'Sell in May' in 53 of the last 63 years

In each of the last six decades, the 'Buy in Fall' time period has averaged a higher return than the 'Sell in May' time period.

In two thirds (42) of the past 63 years, the 'Sell in May' time frame experienced at least a 10% drawdown at some point during it's 173 day window.

A very simple trading strategy of 25% S&P and 75% Tbills during the 'Sell in May' time frame and exactly the opposite ratio during the 'Buy in Fall' period would match the S&P 500 Buy and Hold Returns (8.5%) while reducing the three 50% Drawdowns of the Buy & Hold approach to that of a single 28.9% worse case Drawdown.

A portfolio's market exposure should not be dictated solely by the 'Sell in May' and 'Buy in Fall' approach, but in my opinion, it should be a factor. If you didn't fancy equities through the winter/spring season, you would be hard pressed to justify a fondness for them during the summer/fall time frame.