

SPX Returns Viewed in the Context of the Presidential Term Cycle

Executive Summary:

As of the writing of this paper, Dec 2015, the U.S. is on the cusp of a Presidential Election Year. Inevitably, much focus will be directed at implications for equity market returns as we grind through the election process and elect a new President. Interestingly, there are many statistically significant results that emerge when examining returns of the S&P 500 Index in the context of the U.S. Presidential Cycle. We discuss three examples of returns rising above random fluctuations obtained by rationally bucketing the data using Presidential Term filters.

Analysis:

We confine ourselves to data from the modern two-term U.S. President framework, i.e. since mid-1950s starting with Eisenhower. Table 1 shows how we cut the data. In particular, we treated the Kennedy – Johnson and Nixon – Ford transitions as two distinct, one-term Presidencies.

We find that three consecutive quarters exhibit a statistically significant (95% confidence level) positive bias relative to the overall SPX quarterly return of 2.1%:

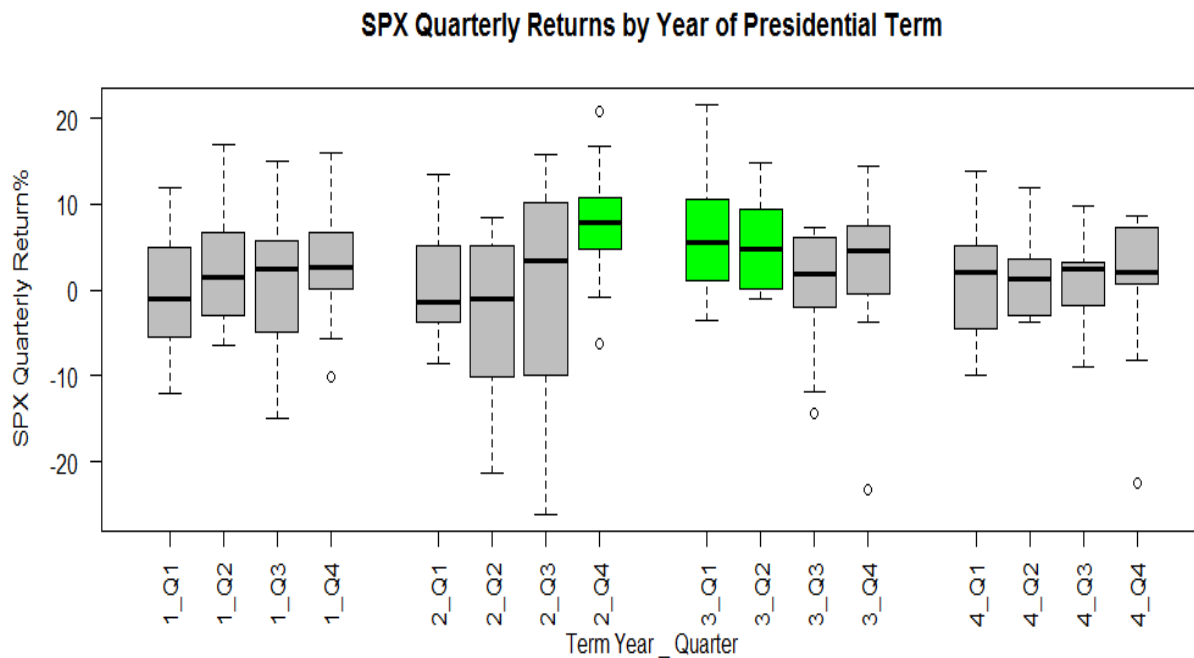
- 4th Quarter of the 2nd Year of a Term: 8.0% average return with a 3.58 t-stat
- 1st Quarter of the 3rd Year of a Term: 7.2% average return with a 2.77 t-stat
- 2nd Quarter of the 3rd Year of a Term: 5.4% average return with a 2.31 t-stat

Figure 1 shows quarterly SPX returns by term year. This mid-term surge makes some intuitive sense from a timing perspective. One can easily imagine uncertainty dominating the first year leading to mid-term optimism followed by the inevitable late term disappointment as the election cycle begins anew with its relentless focus on what is wrong with the sitting administration's policies. Nevertheless, we are not political scientists and leave it to others to demonstrate a definitive causal relationship between equity market performance and economic policies advocated by U.S. Presidents.

Table 1: How we define 1st and 2nd Terms of U.S. Presidents since 1950s

<u>Presidential Terms Data</u>							
Modern Era							
Year	Term	President	YrOfTerm	Year	Term	President	YrOfTerm
1953	1	Eisenhower	1	1985	2	Reagan	1
1954	1	Eisenhower	2	1986	2	Reagan	2
1955	1	Eisenhower	3	1987	2	Reagan	3
1956	1	Eisenhower	4	1988	2	Reagan	4
1957	2	Eisenhower	1	1989	1	Bush	1
1958	2	Eisenhower	2	1990	1	Bush	2
1959	2	Eisenhower	3	1991	1	Bush	3
1960	2	Eisenhower	4	1992	1	Bush	4
1961	1	Kennedy	1	1993	1	Clinton	1
1962	1	Kennedy	2	1994	1	Clinton	2
1963	1	Kennedy	3	1995	1	Clinton	3
1964	1	Kennedy - Johnson	4	1996	1	Clinton	4
1965	1	Johnson	1	1997	2	Clinton	1
1966	1	Johnson	2	1998	2	Clinton	2
1967	1	Johnson	3	1999	2	Clinton	3
1968	1	Johnson	4	2000	2	Clinton	4
1969	1	Nixon	1	2001	1	Bush	1
1970	1	Nixon	2	2002	1	Bush	2
1971	1	Nixon	3	2003	1	Bush	3
1972	1	Nixon	4	2004	1	Bush	4
1973	1	Ford-Nixon	1	2005	2	Bush	1
1974	1	Ford-Nixon	2	2006	2	Bush	2
1975	1	Ford	3	2007	2	Bush	3
1976	1	Ford	4	2008	2	Bush	4
1977	1	Carter	1	2009	1	Obama	1
1978	1	Carter	2	2010	1	Obama	2
1979	1	Carter	3	2011	1	Obama	3
1980	1	Carter	4	2012	1	Obama	4
1981	1	Reagan	1	2013	2	Obama	1
1982	1	Reagan	2	2014	2	Obama	2
1983	1	Reagan	3	2015	2	Obama	3
1984	1	Reagan	4	2016	2	Obama	4

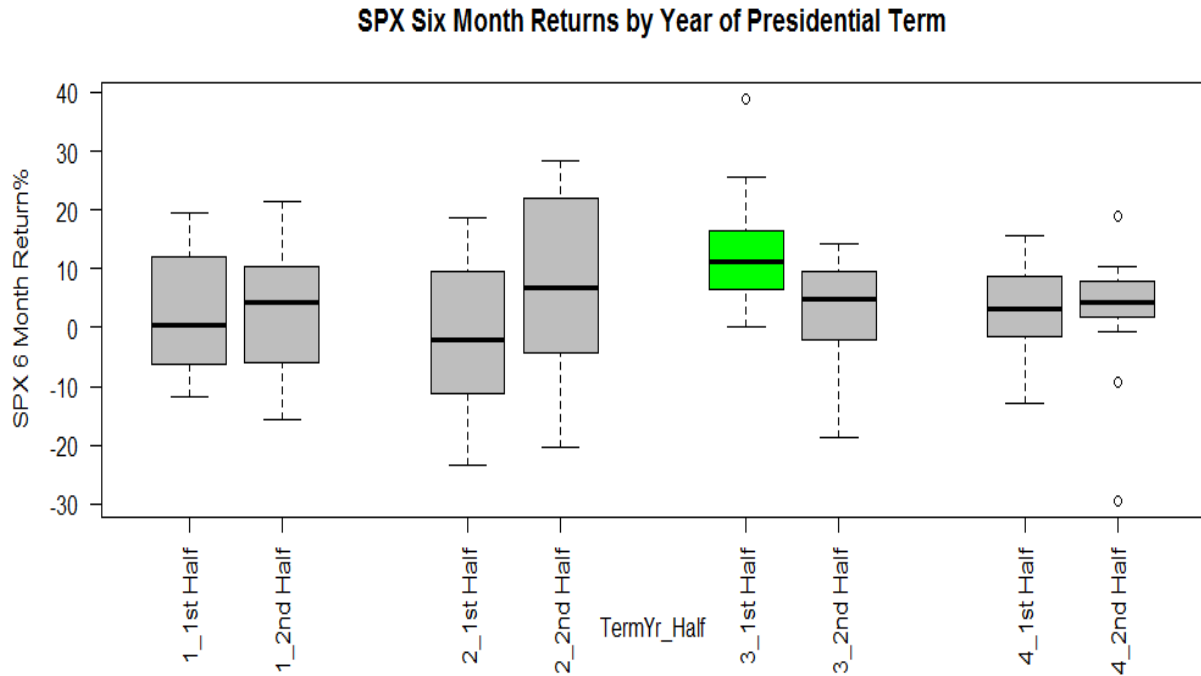
Figure 1: SPX Quarterly Returns by Year of Presidential Term



Given the back-to-back quarterly performance, it is not surprising that the 1st half of the 3rd year of a Presidential Term generates very good returns as shown in Figure 2 compared to the random calendar six month SPX return of 4.2%:

- 1st Half of the 3rd Year of a Term: 12.9% average return with a 3.45 t-stat

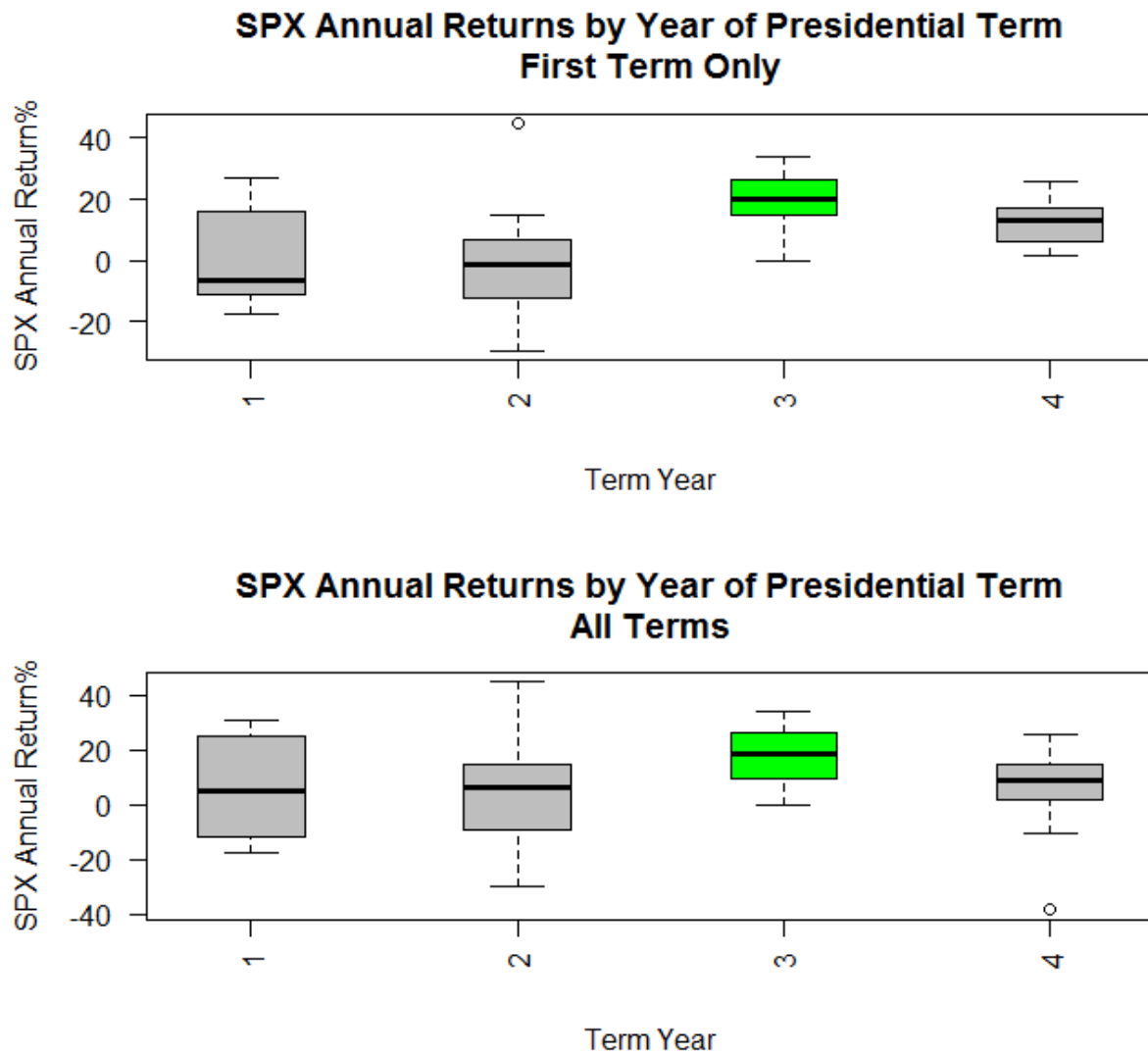
Figure 2: SPX First Half and Second Half of the Year Return by Year of Presidential Term



Which bring us to our final plot, Figure 3, which shows calendar year returns observed during the first term only and during all terms. Given our earlier observation that the middle of a four year term exhibits statistically significant positive bias, we were curious if annual SPX returns during the first term were also much better than random. In a nutshell, the thesis is that a new administration makes one or more policy changes that by mid-term, translate into better than the random calendar year SPX return of 8.7%:

- Calendar Year of the 3rd Year of a Term, **1st Term Only**: 20.4% average return with a 3.14 t-stat
- Calendar Year of the 3rd Year of a Term, **All Terms**: 17.2% average return with a 2.41 t-stat

Figure 3: SPX Annual Returns by Year of Presidential Term



Closing Remarks:

We have demonstrated that in the third year of a U.S. President's term market performance of the S&P 500 Index is significantly higher than average. These excess returns are statistically significant at the 95% confidence level. In addition, we have found other statistically significant effects that are not discussed in this paper. Woodsdale Group is happy to assist in this area, as well as in many other areas, including evaluating the effectiveness of hedges, measuring analyst and PM performance and quantitatively measuring liquidity and the market impact of trading. Please visit woodsdales.com for more information.

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Data/Software Acknowledgement:

Data sources include Money.Net and Yahoo Finance. Software used include R x64 3.2.