

IQS Brief: S&P 500 Positive Months Per Year

2017 has begun with four consecutive positive return months to the S&P 500 Total Return Index. It got us thinking...

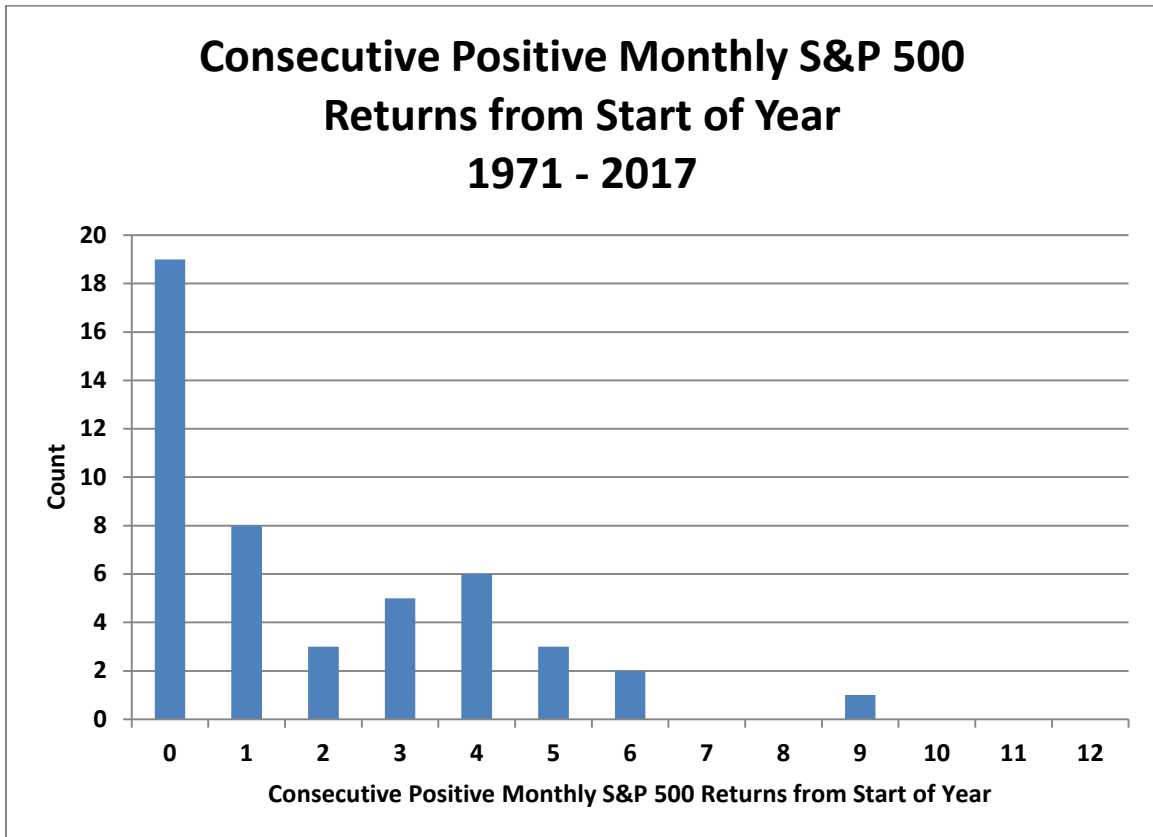
- What is the most consecutive positive months from the start of the year?
- What is the most popular number of positive months in a year?
- What are the returns for the various counts?
- Is there a correlation between the positive months and the return for the year?

Number of Consecutive Positive Months from January in the S&P 500 Each Year

Using the S&P 500 Monthly Total Returns since 1971 through 2016, plus January through April 2017, IQS analyzed both the consecutive positive monthly returns from the start of the year and the total number of positive returns during a calendar year. Over the past 47 years (including 2017 through April), we find that 19 times the S&P started out with a negative return, 8 times had a positive return in January but not February, and one time had an incredible 9 consecutive months of positive returns (January through September 1995). See Graph 1 for more details.



Graph 1 – Counts of Consecutive Positive Monthly Returns from Start of Year for S&P 500

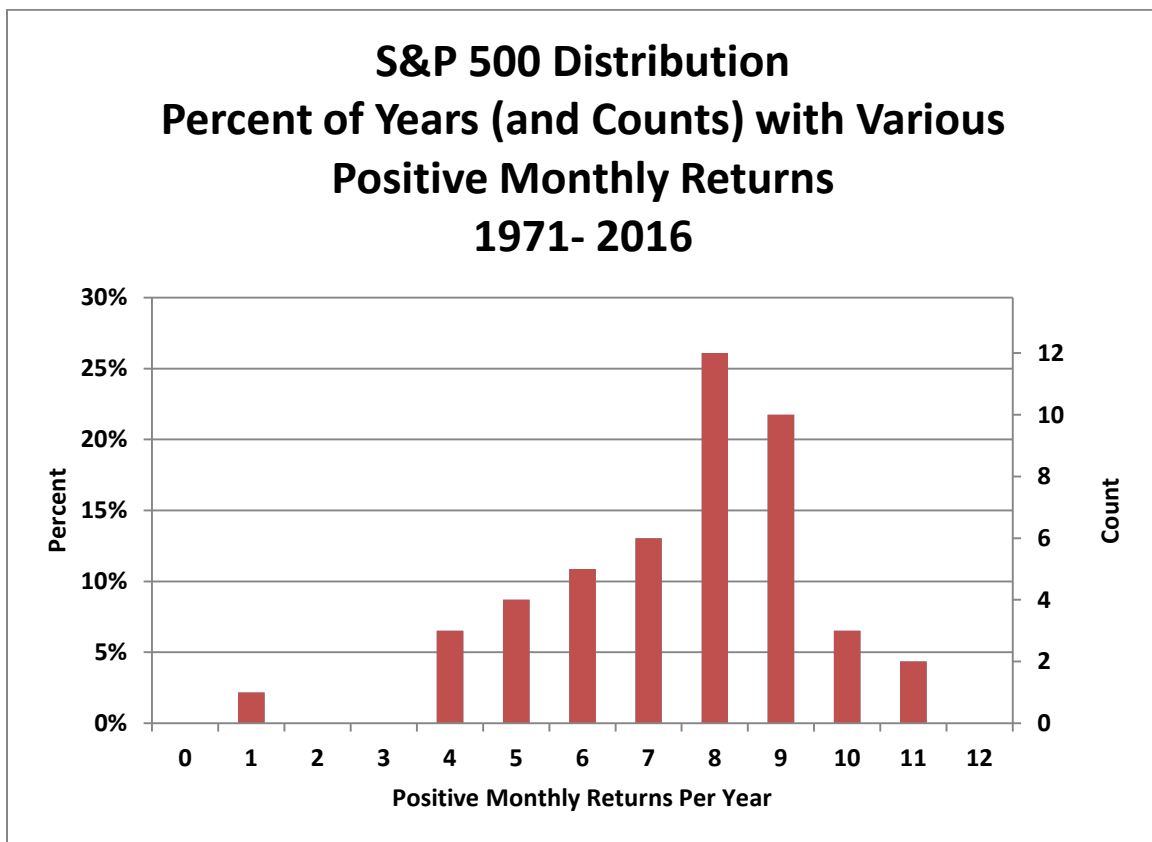




Number of Positive Months per Year in the S&P 500

The previous graph counted the consecutive positive monthly returns. In this section, we view the total number of positive monthly returns in the S&P 500 each year. See Graph 2 below for more details. The graph shows both the count on the right hand axis and the percent of years with various positive returns per year on the left hand axis. Since 1971, there have been no years with exactly 0, 2, 3 or 12 positive monthly returns. The mode, or most common, number of positive months in a year is 8, which has occurred 12 times, or 26% of the years, out of the past 46 years. The second most popular count is 9 positive months, which has occurred 10 times. Since 1971, there have been at least 7 positive months per year over 70% of the time, while 4 or fewer less than 10% of the time.

Graph 2 – Distribution of Positive S&P 500 Monthly Returns per Year

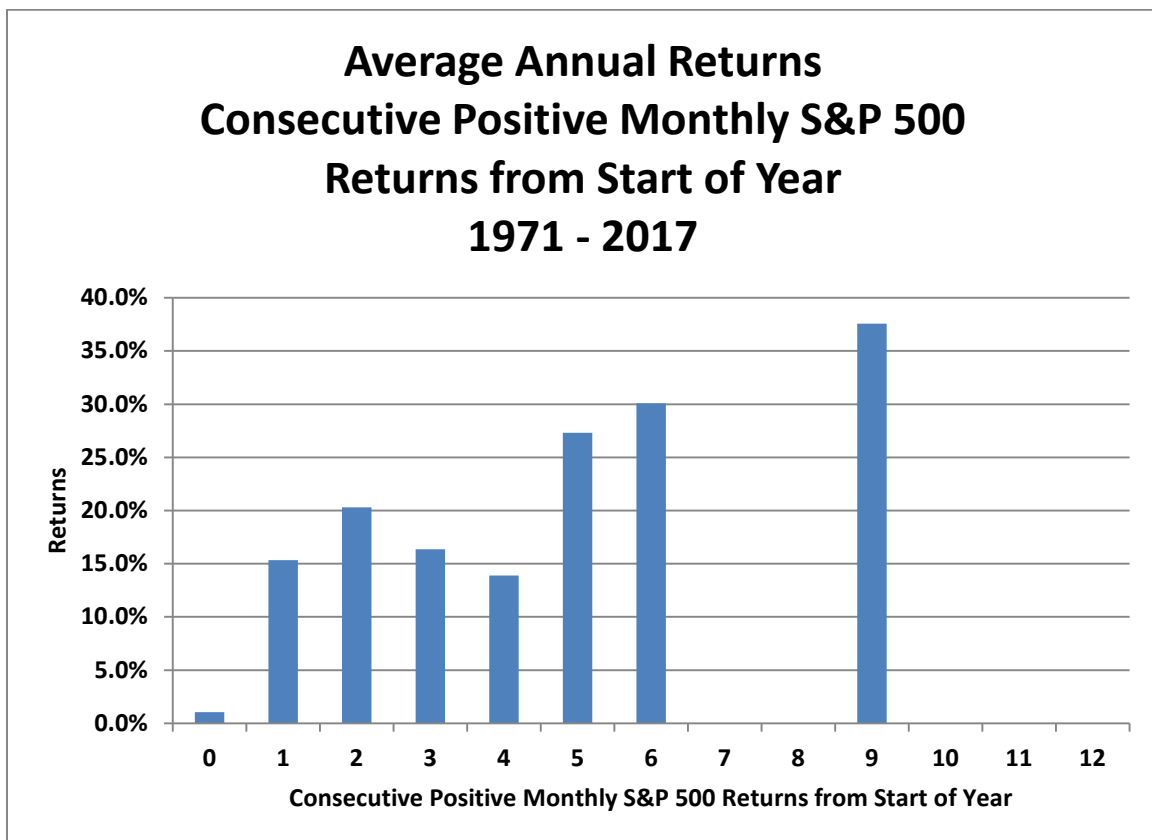




Annual S&P 500 Returns for Various Consecutive Positive Returns from Start of the Year

Should the number of consecutive months of positive monthly S&P 500 returns correlate with higher annual returns? Does the start to the year forecast the level of the annual return? The graph below shows that if the year started with 5 or more positive monthly returns, the average annual return was over 25%! For years in which the year began with 4 or fewer consecutive positive monthly returns, the annual return was much less, roughly 9%. If January was negative, thus the year had no consecutive positive returns to start the year, the average annual return was only 1%.

Graph 3 – Distribution of Positive Monthly S&P 500 Returns per Year





Annual S&P 500 Returns for Various Positive Returns in a Year

What about when the annual returns for the S&P 500 with various monthly positive counts for the year? The chart and graph below shows the monotonic relationship between number of positive monthly returns in a year and the annual S&P 500 return for that year. Every additional positive monthly return predicts a higher annual return, with 6 as the minimum cut-off for a positive return for the year.

Chart: Positive Return Count and Average Annual Return to S&P 500

Positive Returns	Count	Average Annual Return
0	0	
1	1	-26.5%
2	0	
3	0	
4	3	-22.7%
5	4	-.3%
6	5	1.7%
7	6	7.6%
8	12	18.7%
9	10	23.7%
10	3	24.8%
11	2	26.7%
12	0	



Graph 4 - Distribution of Positive S&P 500 Monthly Returns per Year

