INNOVATIVE
QUANT SOLUTIONS, LLC

## Chart of the Month – February 2017:

What happens in a calendar year based on the returns of January and February? We used the S&P 500 total returns since 1971 as our benchmark, and investigated the returns for the entire year, and the remaining months for the year (March through December), based on what happened in January and February.

Observations:

- There are 46 years in our data set.
- We are looking at S&P 500 Total Returns for January and February each year.
- 19 times (41%) both January and February had positive returns.
- 12 times (26%) both January and February had negative returns.
- 15 times (33%) one month had positive returns and one had negative returns.
- 2017 had positive returns in both January and February.
- When both January and February were positive, expect a positive year.
- When both January and February were negative, flip a coin for the year.
- When one of January/February was positive and one was negative, expect a positive year.

When Both January and February were Positive (19 times since 1971, and 2017)

- In all 19 occurrences, the annualized S&P 500 returns were positive for the year.
- In 17 of those 19 occurrences, the returns from March through December were positive.
- In 2 of those 19 occurrences, the returns from March through December were negative.

When Both January and February were Negative (12 times since 1971)

- Of the 12 occurrences, 6 had annualized S&P 500 returns that were positive for the year and 6 had negative returns for the year.
- Of the 12 occurrences, 6 had annualized S&P 500 returns that were positive from March through December and 6 had negative returns from March through December.

When One of January/ February was Postive and One was Negative (15 times since 1971)

- Of the 15 occurrences, 12 had annualized S&P 500 returns that were positive for the year and 3 had negative returns for the year.
- Of the 15 occurrences, 12 had annualized S&P 500 returns that were positive from March through December and 3 had negative returns from March through December.

**SUMMARY CHART BELOW:**

## S&P 500 Total Return: 1971 through 2016

| | | Full Year Positive | | Full Year Negative | | March - December Positive | | March - December Negative | |
|---|---|---|---|---|---|---|---|---|---|
| Jan/Feb | Count | Count | Average Return | Count | Average Return | Count | Average Return | Count | Average Return |
| Both Positive | 19 | 19 | 21.35% | 0 | N/A | 17 | 14.95% | 2 | -7.16% |
| Both Negative | 12 | 6 | 16.91% | 6 | -19.41% | 6 | 27.22% | 6 | -14.90% |
| One Pos/Neg | 15 | 12 | 14.77% | 3 | -6.63% | 12 | 12.54% | 3 | -3.32% |

## Forecast Potential?

Below is a chart showing the correlations of the total returns for January through February against the total returns for March through December. It seems that there is a strong positive correlation when both months have negative returns, or if one month is positive and one month is negative. However, it has a negative correlation when both January and February had positive returns.

- When January and February were both positive, correlation is -.22 Overextension of returns)
- When January and February were both negative, correlation is .93 (worse the start, the worse the finish)
- When one of January/February was positive and one was negative, correlation is .91 (continue with the current trend)

### Correlation of January through February against March through December

| Jan/Feb | Correlation |
|---|---|
| **Both Positive** | **-0.22** |
| **Both Negative** | **0.93** |
| **One Pos/Neg** | **0.91** |