

“Information in Stock Price Patterns” makes a good attempt at starting an interesting paper that is described in the conclusion, namely, seeing if the Lo, Mamaysky, and Wang (2000) technical analysis paper's results are robust to adding Fama-French-Carhart factors. The majority of the paper's weaknesses are explicitly stated within the paper, although, at times, the author could be more specific as to how different attributes of the study were chosen.

The author makes a convincing argument for the necessity of including Fama-French-Carhart factors, especially given that the strongest statistically significant pattern, the rectangle bottom, seems to occur predominantly in high volatility environments.

Sample size is discussed throughout the paper as a potential pitfall. Lo et al. collected daily data for five stocks from ten sectors over seven separate five year spans, for a total of 1750 observations. However, this analysis used only five stocks from five segments over five years. The fact that Lo et al. found statistically significant results for six of eight patterns, while only three patterns were statistically significant in this paper can potentially be explained by the sample size. If left as-is, some type of sample-size robustness tests should be conducted. The fact that there were only 414 data points in the broadening top proxy return set, which was found statistically significant, and 26,000 returns in the unconditional sample also seems like a potential problem.

Additionally, repeatedly throughout the paper, the reader is left wondering why five stocks were chosen from five sectors instead of ten from ten, and so on. Maybe Lo et al. provided the reasoning behind this, but it was not explained in this paper. Perhaps checking the results using several smoothing bandwidths or demonstrating statistical significance based on splitting up returns in five, ten, and twenty, rather than just only ten buckets would inspire more faith in the results. Here, however, the sample size might come into play again; it is possible that varying the number of buckets

was impossible given the small sample.

The author also notes that the patterns ending in maxima are identified approximately 70% more frequently than their inverted counterparts. As four patterns and their reciprocals are included, this does seem strange, if they are expected to happen with equal frequency. As has been previously discussed, market conditions, such as volatility, may affect the incidences of certain patterns, and skew this result, especially since we're dealing with such a limited time period. Sample size and problems with code are identified as potential causes by the author. If these are found not to be at fault, maybe the way patterns are identified should be varied. Currently, patterns must be completed within a 35 day trading window. Maybe patterns ending with minima take longer to occur, and, therefore, are cut out of the data set. No statistics were given as to how many patterns the 35 day window eliminated or approximately how long each pattern took to occur.