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Rise and fall of calendar anomalies over a century☆

Abstract

In this paper, we conduct a comprehensive investigation of calendar anomaly evolution in the US stock market (given by the Dow Jones Industrial Average) for the 1900–2018 period. We employ various statistical techniques (average analysis, Student's t-test, ANOVA, the Kruskal-Wallis and Mann-Whitney tests, modified cumulative abnormal returns approach), analysis, and the trading simulation approach to analyse the evolution of the following calendar anomalies: day of the week effect, turn of the month effect, turn of the year effect, and the holiday effect. The results revealed that 'golden age' of calendar anomalies was in the middle of the 20th century. However, since the 1980s all calendar anomalies disappeared. This is consistent with the Efficient Market Hypothesis.

Keywords: Calendar anomalies, Day of the week effect, Turn of the month effect, Turn of the year effect, Holiday effect, Stock market, Dow Jones Industrial Average Index