Reverse TOM Effect in May on United States capital market

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Introduction

The turn-of-the month (TOM) effect refers to abnormal high stock returns in a time interval, that include the first trading days of a month and the last trading days of the previous month.

Circumstances that could favor this calendar anomaly:

- investors' reactions to the news about macroeconomic indicators, to the companies' results or to the public announcements of corporate strategic investment decisions;
- the standardizations of some payments;
- window dressing practice;
- the transactions performed to diminish the tax liabilities etc.

The persistence in time of TOM Effect is a controversial subject in financial literature. Previous investigation found some particularities of the TOM effect for different durations of the year.

This paper explores the behavior of returns from United States capital market in a time interval that starts in the last trading day of April and it ends in the fourth trading day of May. In this time interval, the influence of circumstances specific to the TOM effect could collide with the impact of selling stocks in the framework of Halloween strategies.

The well-known Halloween strategies are based on the old saying "Sell in May and go away", which refers to the belief among many investors that May could be the start of a bear market. To avoid the losses, they sell stocks, and their transactions could lead to a decline of stocks returns. The bear market is supposed to last until autumn, when the investors are expected to buy stocks.

A Halloween strategy contains two main phases. In the first one, the investors buy stocks in November or in the following months. The second phase consists in selling the stocks in April or May.

This investigation covers the period January 2010 - June 2025 and it uses four major indexes from United States capital market.

Data and methodology

Data: daily closing values of four major indexes: Standard & Poor's 500 (S&P 500), Dow Jones Industrial Average (DJIA), NASDAQ Composite (NASDAQ) and Russell 2000.

Methods: OLS and GARCH(1,1) models with dummy variables. Two time intervals:

- ToMay, which starts on the last trading day of April and it ends on the fourth trading day of May;
- R_ToMay, which comprises the trading days of a year that are not included in ToMay time interval.

Empirical Results

Both OLS and GARCH models revealed, for each of the four indexes, abnormal low returns that occurred in the ToMay time interval.

Conclusions

- The abnormal low returns on the last trading day of April and on the first four trading days of May could be viewed as a reverse TOM Effect.
- This form of seasonality could be explained by the impact of selling stocks in the framework of Halloween strategies.
- Many forms of seasonality experienced changes when capital markets passed from turbulent to quieter times. The period of this investigation was complex, with many extraordinary events and processes (recovery from the global financial crisis and from the Great Recession, annexation of Crimea by the Russian Federation, COVID-19 pandemic, changes in Federal Reserve's monetary policy, Russian invasion of Ukraine, global energy crisis, Gaza-War, Iran-Israel war, threats of the trade wars, etc.).

It is hard to anticipate if the abnormal low returns from the ToMay time interval would persist in quieter times.