

Day-of-the-week effect on Bucharest Stock Exchange in the meteorological seasons

Ramona Dumitriu

Razvan Stefanescu

Introduction

Various forms of day-of-the-week (DOW) effect on the financial markets: significant differences between returns from Fridays and Mondays, abnormal returns occurring on Tuesdays etc.

This paper approaches the characteristics of DOW effect on Romanian capital market in the meteorological seasons. Such characteristics could be influenced by three categories of circumstances: weather, daylight and vacancies.

This investigation covers two periods:

- January 2007 - December 2013, BSE was affected by circumstances, such as the Global Financial Crisis, the Great Recession, the European debt crisis and the domestic political tensions, that induced pessimism among investors;

- January 2014 - June 2025, when the evolution of Romanian capital market was influenced by complex events (the Russo-Ukrainian War, COVID-19 pandemic, threats of the trade wars, the global energy crisis, the conflicts in the Middle East, etc.).

Data and Methodology

Data: daily closing values of four major indexes from Bucharest Stock Exchange: BET, BET-FI, BET-XT and BET-NG.

Methods: OLS models with dummy variables and the nonparametric Wilcoxon rank-sum tests.

Empirical Results for the period January 2007 - December 2013

In spring months, in the case of BET and BET-XT indexes, the returns from Thursday were significantly higher than the returns from Monday (Figure 1).

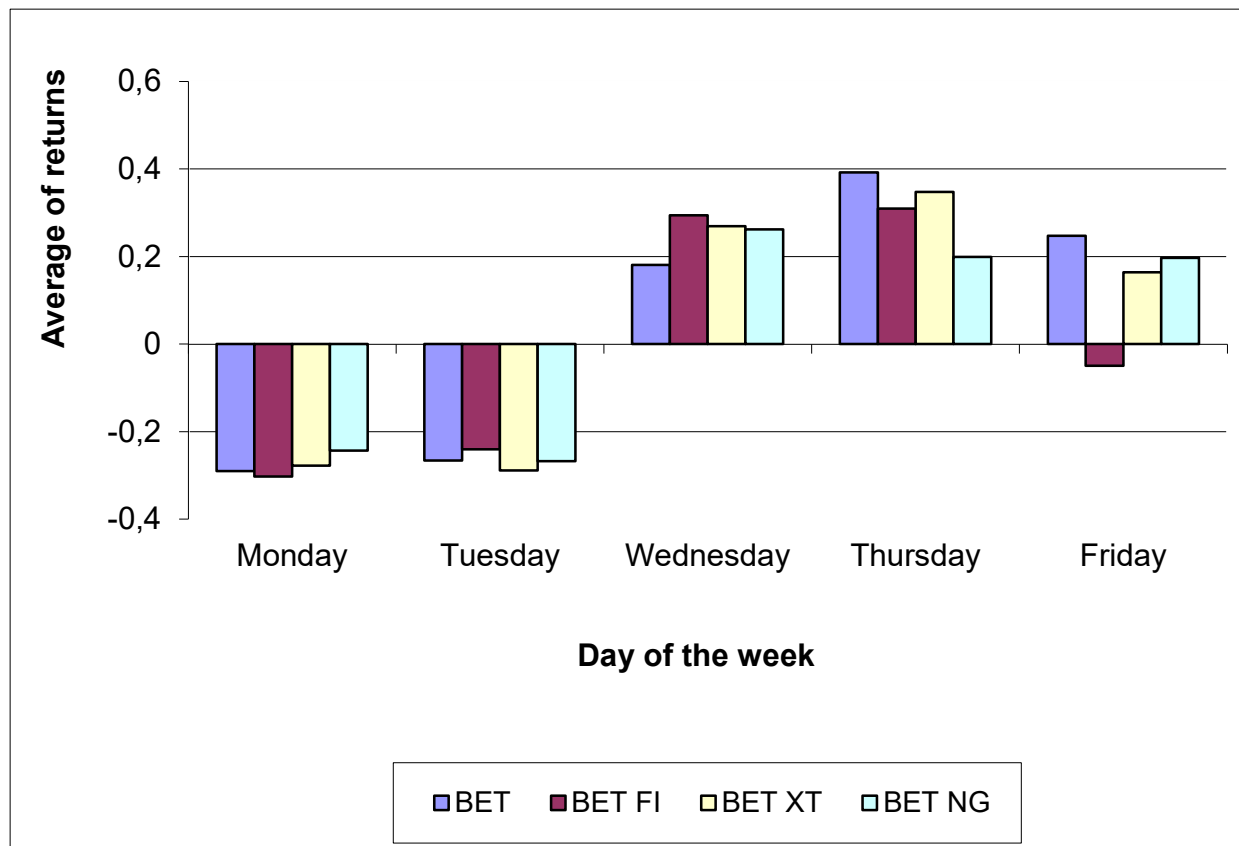


Figure 1. Average returns on the days of the week in the spring months for the period January 2007 - December 2013

Empirical Results for the period January 2014 - June 2025

During winter months, in the case of BET-FI index, the returns from Friday were significantly higher than the returns from Monday (Figure 2).

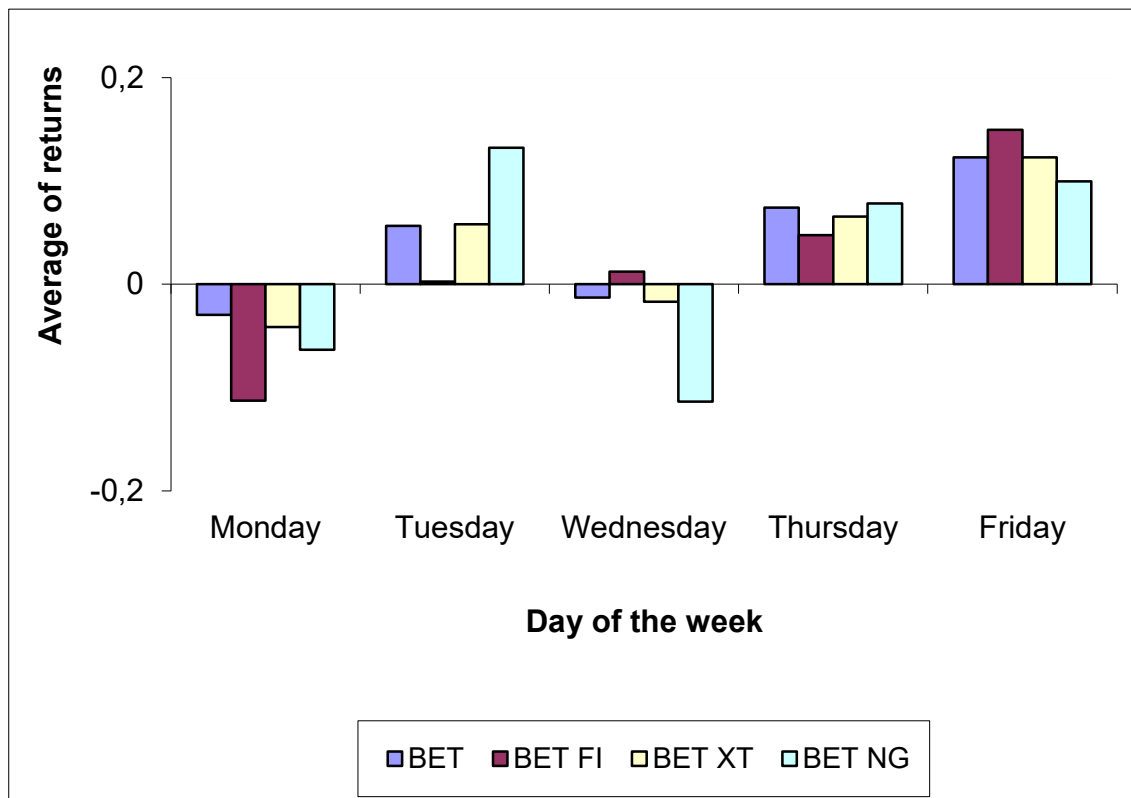


Figure 2. Average returns on the days of the week in the winter months for the period January 2014 - June 2025

In the spring months, the returns of BET and BET-XT indexes were significantly higher on Tuesday than on Wednesday (Figure 3).

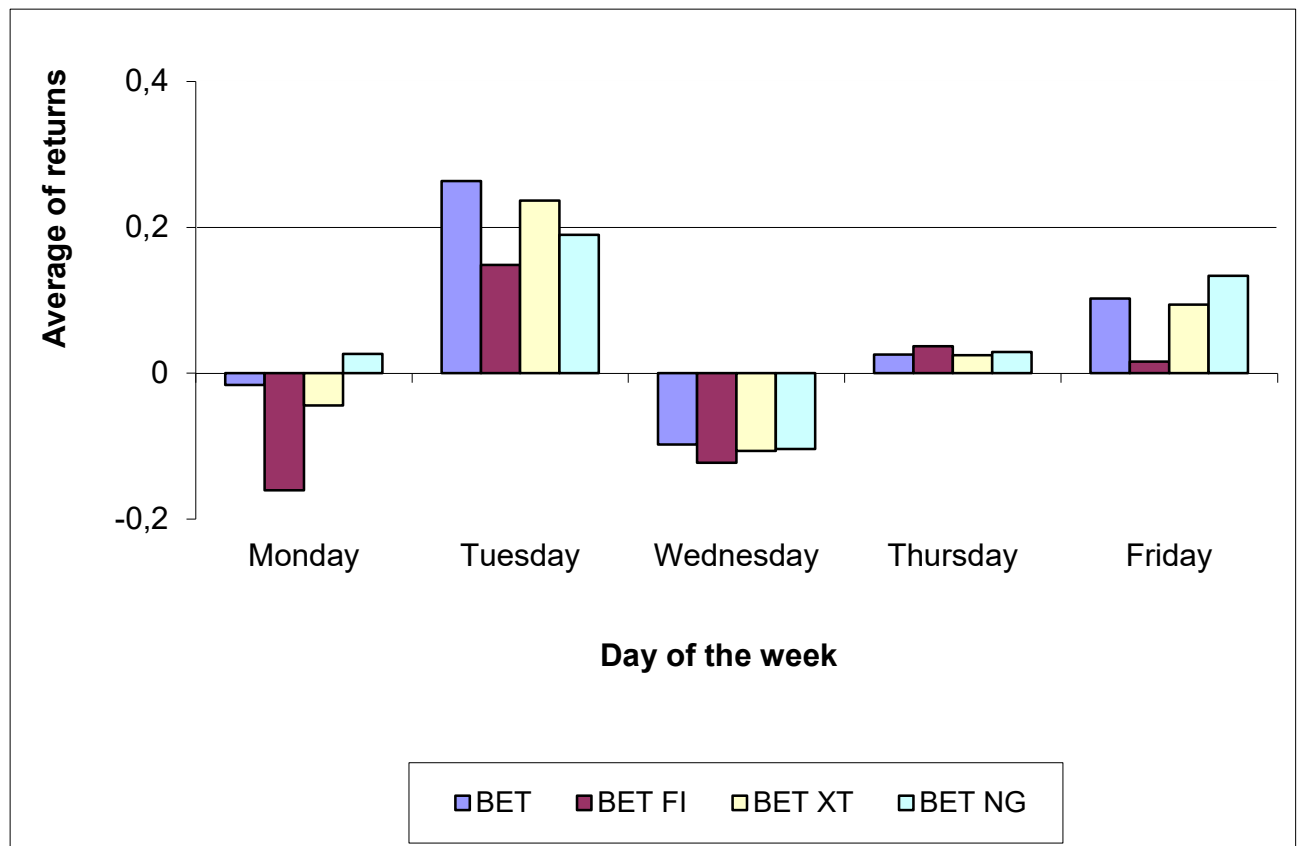


Figure 3. Average returns on the days of the week in the spring months for the period January 2014 - June 2025

Conclusions

- The DOW effect on BSE has some particularities for the four meteorological seasons.
- The passing from a period characterized by the investors' pessimism (January 2007 - December 2013) to a complex

but quieter period (January 2014 - June 2025) caused significant changes in the daily seasonality.

- For both periods, in the case of BET and BET-XT indexes, the daily seasonality was more visible in the spring months than in the other meteorological seasons; however, the negative average returns on Tuesday between January 2007 and December 2013 period became positive between January 2014 and June 2025.
- In the case of BET-FI, an index associated with financial companies, the classical weekend effect occurred in the winter months.