General Session | General Session | GS-3 Knowledge utilization and sharing

[2L6-GS-3]Knowledge utilization and sharing

座長：西村 拓一（北陸先端科学技術大学院大学） [現地]
Wed. Jun 7, 2023 5:30 PM - 7:30 PM Room L (C2)

5:30 PM - 5:50 PM

[2L6-GS-3-01]A Study of Factors Affecting Stock Price Fluctuation that assists investors in decision-making during the evaluation phase of portfolio companies.

〇shingo kawamura[1], SEN ZYANG[2], kenta nakamura[2], haruka yamashita[1] (1. Sophia university, 2. Figurout Co., Ltd.)

Keywords:time series analysis, stock price fluctuation, state space model with regression components

Several studies have been proposed to analyze the factors that cause stock price fluctuations. It's known that utilizing textual data is effective in building models. In order to utilize text data in this method, it's necessary to quantify sentences using bag-of-words, etc., and at that time, concrete information is abstracted. Therefore, when it comes to investigating what specific factors caused the stock price fluctuation at a certain point in time, it's inappropriate to do so. In this case, it's desirable to construct a model using data other than textual data first, and then clarify the textual information to be focused on from the model. In this study, I first build a time-varying coefficient model using numerical data. Then, by focusing on the residuals of the model, we found the relationship between stock price fluctuations and specific factors expressed in text data at surrounding points in time.