

## **ABSTRACT**

There are two different process to forecast the aggregate variable of interest, that is to include disaggregate variables separately and aggregating those forecast or, alternatively using only the aggregate information or variable for forecasting the aggregate. The first process is known as component forecast and the alternative process is known as conventional forecast. In this paper it is proved by theoretical approach that the component forecast outperform the conventional forecast when it is generally accepted that forecast aggregation is an empirical issue. Empirical results in the literature often go unexplained but this paper explains that once appropriate model has been found, componenet forecast can significantly improve forecast performance. There are four models used for forecasting, autoregressive integrated moving average model (ARIMA), ARIMA with day of the week effect, ARIMA-GARCH, ARIMA-GARCH with day of the week effect. The abstract of this paper to investigate empirically whether the use of component forecasts improve the accuracy of a portfolio forecast which uses only aggregate data for a specific model.

**Keywords:** Index forecasting, aggregate data, stock return

