THE UNIVERSITY OF CHICAGO | DEPARTMENT OF STATISTICS

Master's Thesis Presentation

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"The Predictive Power of Multi-horizon Economic Forecasts — A SARIMAX Approach"

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Abstract

Based on economic theory, various indicators are utilized to anticipate future market conditions. This study explores whether existing forecasts at different horizons can be effectively leveraged to predict the future values of macroeconomic indicators. Specifically, it investigates whether incorporating forecasts from a variety of indicators enhances predictive performance compared to models relying solely on a single indicator's own forecast history. Utilizing a SARIMAX framework, the empirical results demonstrate that incorporating multi-horizon forecasts of the same indicator yields more precise predictions than those derived purely from historical realized data. Furthermore, the study suggests that while multi-horizon forecasts are highly informative, the inclusion of secondary macroeconomic indicators provides marginal gains, indicating that the primary indicator's forecast horizons already internalize much of the relevant systemic information.

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