ECOM90025 Advanced Data Analysis

Tutorial 5

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Introduction

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Seek help?

- Ed discussion board
- Consultations: refer to Canvas for details

FGL data

Use the ‘fgl‘ data and apply it to a multinomial Logistic model with all interactions.

- What is the model in the lecture?
- What is the difference between the "all-interaction" model and the lecture/textbook model?
- Compare their results
- You may select one type for discussion.

Distributed Multinomial Regression

Estimate a distributed multinomial regression by using the ‘fgl‘ data.

- Visualise your results.
- Explain what you are doing. This is more important than knowing what command to use and revising parameter values.

Compare to the multinomial regression

Compare your results to the previous multinomial Logistic regression.

In-sample prediction

Compare DMR and Multinomial Logistic Regression's in-sample prediction.

- If your previous Multinomial Logistic Regression uses cross-validation, you should change it to the standard 'glmnet' function.
- 'glmnet' does not respond to 'AICc', so we need to code it. Fortunately, we can find it online.
  - Note: not everything online is correct. You still need to check! At least to make yourself comfortable.
  - Share your code and thoughts.

Then do a box plot.

Lastly, do OOS.

The end

Thanks for your attention!