

DSC5211C QUANTITATIVE RISK MANAGEMENT

Time Series Analysis

You should submit your report online **by 18:00 on Wednesday 6th March 2019 at the latest**. Please note NUS Regulations on plagiarism. Any use of supporting material must be fully referenced and sourced (including books, articles and websites).

In this assignment you are asked to choose a problem of your interest and apply *some* of the methodologies studied in sessions 1 to 5 in the analysis of your problem.

Please feel free to choose and collect your own data.

1. All the data, together with the files of the statistical package used, need to be submitted. All data sources need to be provided.
2. In your assignment you should complete the following steps:
 - a) Motivation and general description of your problem. 10%
 - b) Theoretical explanation for the forecasting model. 15%
 - c) Estimation of the model parameters. 10%
 - d) Analysis of the model results. 15%
 - e) Out-of-sample forecasts for *at least five periods*. 10%
 - f) Comments on the quality of the forecasts. 15%
 - g) Conclusions 10%

Length and Style Requirements 15%

- Length – up to 15 pages **including** tables, figures and bibliography.
- 1.5 spacing should be used throughout.
- Reports should have one inch margins (2.5 cm) on all sides and use 12 point font.
- Every Table and Figure used in the Report should be **numbered** and **referred to** in the text.
- References should be listed alphabetically by author at the end of the report. In-text citations should be indicated by the author's last name and year of publication, e.g., (Norman 1977) or Norman (1977).

GROUP MEMBERS:

- You are free to find your own group members: 3 elements per group.
- Be inclusive. Try to choose colleagues from different nationalities, genders, ethnicities, and academic backgrounds to be part of your team.
- Register your group in the IVLE.

SUBMISSION RULES:

- Upload your report to IVLE > FORECASTING PROJECT.
- The file should have the format "team_name.zip".