Syllabus

[cmcd.economia@fgv.br]

Course: Special Topics in Time Series Econometrics - Forecasting
Professor: Pedro Valls

2018 SECOND SEMESTER

COURSE OUTLINE

The course provides additional topics in time series methods in econometrics covering Forecasting in Linear and Non-Linear Model, Forecasting in Large Data Set and Volatility

METHODOLOGY

Apart from lectures, students will have to choose a research paper in time series econometrics to present, critically assess and replicate. The in-class presentation should be based on slides prepared by the student and submitted as part of the assessment. Students will also write a referee report on the selected paper. The guidelines for the report will be given in the lectures. Finally, students will have to carry out an empirical application (or simulations) intimately connected to the selected research paper.

PROGRAM

1. Forecasting with Linear Models
2. Automated Model Selection
3. Model Misspecification
4. Forecasting with Dynamic Models
5. Forecasting Evaluation and Combination
6. Forecasting Time Series Models
7. Forecasting Non-Linear Models
8. Forecasting in Large Data Sets and Volatility

BIBLIOGRAPHY

Main Reference
1. Ghysels, E. & Marcellino, M. (2018) "Applied Economic Forecasting using Time Series Models", Oxford University Press.

Additional References - incomplete
2. Elliot, G. and Timmermann, A. (2016) "Economic Forecasting". Princeton University Press.
3. Hamilton (1994) "Time Series Analysis". Princeton University Press.
4. Harvey, A.C. (1993) "Time Series Models". MIT Press.
5. Hendry, D.F. and Doornik, J.A. (2014) "Empirical Model Discovery and Theory Evaluation: Automatic Selection Methods in Econometrics", The MIT Press.

6. Lutkerpohl, H. (2005) "A New Introduction to Multiple Time Series Analysis". Spirnger Verlag.
7. Stock, J.H., and M.W. Watson (2006) "Forecasting with Many Predictors," ch. 6 in *Handbook of Economic Forecasting*, ed. by Graham Elliott, Clive W.J. Granger, and Allan Timmermann, Elsevier, 515-554.

ARTICLES

Can find some of them here (artigos)

GRADING

Applied Econometric Paper: 50%
Referee Report: 20%
Presentation: 20%
In class participation: 10%

[OBS: Art. 46º - Aos alunos dos Cursos de Mestrado Acadêmico e Doutorado é atribuída nota em cada disciplina, variável de 0 (zero) a 10 (dez).
I - A nota final dos alunos em cada disciplina, variável de 0 (zero) a 10 (dez), é a média ponderada das notas atribuídas:
 I.I) a uma ou mais formas de avaliações intermediárias;
 I.II) à avaliação final, que pode constar de prova escrita ou de trabalho final;
II - O peso atribuído à nota de cada uma das formas de avaliação da disciplina é determinado pelo professor da disciplina e deve constar explicitamente do respectivo programa, não sendo permitido atribuir peso superior a 60% (sessenta por cento) a nenhuma das formas de avaliação especificadas.]

PROFESSOR - EMAILS

pedro.valls@fgv.br