

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet:	Ekonometrija časovnih vrst
Course title:	Applied Time Series Analysis

Študijski program in stopnja Study programme and level	Študijska smer Study field	Letnik Academic year	Semester Semester
Doktorski program ekonomskih in poslovnih ved, tretjestopenjski program	Usmeritev Ekonomija in usmeritev Poslovne vede	1.	2.
Doctoral Program in Economics and Business	Economics and Business track	1.	2.

Vrsta predmeta / Course type	Metodološke osnove / Methodological foundations
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Univerzitetna koda predmeta / University course code:	
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Predavanja Lectures	Seminar Seminar	Vaje Tutorial	Klinične vaje Laboratory work	Druge oblike dela	Samost. delo Individ. work	ECTS
25				35	60	4

Nosilec predmeta / Lecturer:	Prof.dr.Igor Masten
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Jeziki / Languages:	Predavanja / Lectures:	Angleški/English; Slovenski/Slovenian
	Vaje / Tutorial:	Angleški/English; Slovenski/Slovenian

Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:

Opravljen Ekonometrija 2 na magistrskem programu Ekonomije na Ekonomski fakulteta v Ljubljani.
Orientacija za predhodno znanje. Učbenika:
Greene, W. (2003), Econometric Analysis, 5th Edition.
Amemiya, T. (1994), Introduction to Statistics and Econometrics
Simon, C. P. in L. Blume (1994), Mathematics for Economists

Prerequisites:

Econometrics 2, MSc Economics, Faculty of Economics, Ljubljana, or equivalent.
Prerequisite textbooks:
Greene, W. (2003), Econometric Analysis, 5th Edition.
Amemiya, T. (1994), Introduction to Statistics and Econometrics
Simon, C. P. and L. Blume (1994), Mathematics for Economists

Vsebina:

1. Avtoregresijski modeli in koreni enote
2. Vektorsko avtoregresijski modeli
3. Vektorski modeli korekcije napak
4. Strukturni VAR modeli
5. Dinamični faktorski modeli
6. Analiza regresijskih modelov s faktorji
7. VAR in VEC modeli s faktorji models

Content (Syllabus outline):

1. Autoregressive models and unit roots
2. Vector Autoregressive models
3. Vector Error-correction models
4. Structural VARs
5. Dynamic factors model
6. Factors-augmented regression analysis
7. Factor-Augmented VAR and factor-

augmented VEC models

Temeljni literatura in viri / Readings:

H. Luetkepohl and M. Kratzig (2004): Applied Time Series Econometrics, Cambridge University Press
H. Luetkepohl (2005), New Introduction to Multiple Time Series Analysis, Springer
Hamilton, J.D. (1994), Time Series Analysis
Greene, W. (2003), Econometric Analysis, 5th Edition.
Davidson and MacKinnon (1993), Estimation and Inference in Econometrics.
Harville, D. A. (1994), Matrix algebra from a statistician's perspective.

Cilji in kompetence:

Cilj predmeta je nuditi napredno in uporabno znanje na področju analize časovnih vrst in makroekonomije

Objectives and competences:

The objective of the course is necessary training in topics of advanced applied time series econometrics and applied macroeconomics.

Predvideni študijski rezultati:

Znanje in razumevanje:

- Poznavanje modelov časovnih vrst na napredni upoabni ravni.
- Uporabna makroekonomska analiza in napovedovanje
- Modeliranje makroekonomskih in finančnih časovnih vrst

Intended learning outcomes:

Knowledge and understanding:

- Knowledge of time series models at applied level
- Applied work in macroeconomic analysis and forecasting
- Modelling of macroeconomic and financial time series

Metode poučevanja in učenja:

Predavanja, samostojno delo na podlago rednih domačih nalog, seminarska naloga

Learning and teaching methods:

Lectures, independend work based on regular assginments, empirical applications

Načini ocenjevanja:

Način (pisni izpit, ustno izpraševanje, naloge, projekt)
50 % pisni izpit,
50% seminarska naloga
A – D (D predstavlja neuspešno opravljen izpit)

Delež (v %) /
Weight (in %)

Assessment:

Type (examination, oral, coursework, project):
50 % written exam, 50% term paper
A – D (D represents a fail)

Reference nosilca / Lecturer's references:

Prof.dr.Igor Masten

1. BANERJEE, Anindya, MARCELLINO, Massimiliano, MASTEN, Igor. An Overview of the Factor-augmented Error-Correction Model. V: Koopman, Siem Jan in Eric Hillebrand (ur.). Advances in Econometrics:

Dynamic Factor Models. Emerald Publishing ISSN: 0731-9053 (v tisku), 2015

2. Banerjee, A., M. Marcellino and I. Masten: "Forecasting with Factor Augmented Error-Correction Models", *International Journal of Forecasting*, 30(3), 2014.

3. MASTEN, Igor. Optimal monetary policy with Balassa-Samuelsion-type productivity shocks. *J. comp. econ.*, Mar. 2008, vol. 36, no. 1, str. 120-141.

4. BREZIGAR MASTEN, Arjana, CORICELLI, Fabrizio, MASTEN, Igor. Non-linear growth effects of financial development : does financial integration matter?. *J. int. money financ.*. [Print ed.], Mar. 2008, vol. 27, no. 2, str. 295-313.