

UČNI NAČRT PREDMETA / COURSE SYLLABUS

Predmet: Regresijski modeli v ekonomiji in poslovnih vedah
Course title: Regression models in economics and business

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

Univerzitetna koda predmeta / University course code:

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. Miroslav Verbič

Jeziki /

Languages:

Predavanja / Angleški/English; Slovenski/Slovenian

Lectures:

Vaje / Tutorial: Angleški/English; Slovenski/Slovenian

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

Vpis v letnik študija.

Prerequisites:

Course enrollment.

Vsebina:

1. Linearni regresijski model in cenilka najmanjših kvadratov
2. Lastnosti cenilke najmanjših kvadratov in preverjanje domnev
3. Modelska diagnostika in osnove univariatnih časovnih vrst
4. Modeli diskretne izbire
5. Analiza panelnih podatkov

Content (Syllabus outline):

1. Linear regression model and least squares estimation
2. Properties of the least squares estimator and hypothesis testing
3. Model diagnostics and basics of univariate time series
4. Discrete choice analysis
5. Panel data analysis

Temeljni literatura in viri / Readings:

1. Gujarati, D. N. and D. C. Porter: *Basic Econometrics: Fifth Edition*. New York, NY: McGraw-Hill/Irwin, 2009.
2. Greene, W. H.: *Econometric Analysis: Sixth Edition*. New Jersey: Prentice Hall, 2008.
3. Pindyck, R. S. and D. L. Rubinfeld: *Econometric Models and Economic Forecasts: Fourth Edition*. Boston: Irwin/McGraw-Hill, 1998.
4. Wooldridge, J. M.: *Econometric Analysis of Cross Section and Panel Data: Second Edition*. Cambridge, MA: The MIT Press, 2010.

Additional study materials will be distributed during the course as necessary.

Cilji in kompetence:

Da bi lahko razumeli kompleksno ekonomsko in poslovno okolje, je sposobnost kompetentne kvantifikacije in analize ekonomskih in poslovnih podatkov ključnega pomena. Regresijska analiza je eden najbolj celovitih pristopov za doseg tega cilja. Namen tega predmeta je nasloviti osnovne metodološke koncepte linearnega regresijskega modela in nato na podlagi tega uvesti tri dodatne, bolj specializirane teme: univariatne časovne vrste, modele diskretne izbire ter analizo panelnih podatkov. Predmet je zelo praktično orientiran, saj so vse analizirane teme praktično predstavljene na številnih primerih.

Objectives and competences:

In order to understand the complicated economic and business environment it is vital to be able to competently quantify and analyze economic and business data. Regression analysis is one of the most comprehensive approaches to achieve this goal. The purpose of this course is thus to address the basic methodological concepts related to the linear regression model and then introduce, based on this, three additional, more specialized topics; univariate time series, discrete choice analysis and panel data analysis. The course is very much practically oriented; the analyzed topics are applied to data in various examples.

Predvideni študijski rezultati:

Ko bodo opravili predmet, naj bi bili študenti sposobni neodvisno zasnovati svoj raziskovalni problem in z dodatnim študijem metodoloških pristopov, ki jih bodo uporabili, izvesti aplikativno regresijsko analizo.

Intended learning outcomes:

After completing this course, the student should be able to set up independently his research problem and, with additional study of the methodological topics used in his analysis, perform the applied regression analysis.

Metode poučevanja in učenja:

Predmet je sestavljen iz predavanj in računalniških primerov. Metodološki pristopi, ki se jih študenti naučijo na predavanjih, so nato praktično prikazani na računalniških primerih.

Learning and teaching methods:

The course consists of lectures and computer exercises. Methodological approaches that are taught at any given lecture are then demonstrated at the subsequent computer session.

Načini ocenjevanja:	Delež (v %) / Weight (in %)	Assessment:
Naloge	30%	Assignments
Seminarji	30%	Seminars
Izpit	40%	Exam

Reference nosilca / Lecturer's references:

Cirman Andreja, Pahor Marko, Verbič Miroslav: Determinants of Time on the Market in a Thin Real Estate Market. *Engineering Economics*, 26(2015), 1, pp. 4-11.

Verbič Miroslav, Črnigoj Matjaž: Corporate Investment and Corporate Taxation during the Economic Crisis

in Slovenia. *Eastern European Economics*, 52(2014), 6, pp. 32-56.

Tkalec Marina, Vizek Maruška, Verbič Miroslav: Balance Sheet Effects and Original Sinners' Risk Premiums. *Economic Systems*, 38(2014), 4, pp. 597-613.

Črnigoj Matjaž, Verbič Miroslav: Financial Constraints and Corporate Investments during the Current Financial and Economic Crisis: The Credit Crunch and Investment Decisions of Slovenian Firms. *Economic Systems*, 38(2014), 4, pp. 502-517.

Verbič Miroslav, Spruk Rok: Aging Population and Public Pensions: Theory and Macroeconometric Evidence. *Panoeconomicus*, 61(2014), 3, pp. 289-316.

Verbič Miroslav, Čok Mitja, Božič Ana: Demand for Food during Economic Transition: An AIDS Econometric Model for Slovenia, 1988–2008. *Post-Communist Economies*, 26(2014), 2, pp. 277-295.

Verbič Miroslav, Majcen Boris, Čok Mitja: Education and Economic Growth in Slovenia: A Dynamic General Equilibrium Approach with Endogenous Growth. *Ekonomický časopis*, 62(2014), 1, pp. 19-45.

Mencinger Jernej, Aristovnik Aleksander, Verbič Miroslav: The Impact of Growing Public Debt on Economic Growth in the European Union. *Amfiteatru Economic*, 16(2014), 35, pp. 403-414.

Stanovnik Tine, Verbič Miroslav: Earnings Inequality and Tax Progressivity in Slovenia, 1991–2009. *Acta Oeconomica*, 63(2013), 4, pp. 405-421.

Čok Mitja, Urban Ivica, Verbič Miroslav: Income Redistribution Through Taxes and Social Benefits: The Case of Slovenia and Croatia. *Panoeconomicus*, 60(2013), 5, pp. 667-686.

Sharifi-Tehrani Mohammad, Verbič Miroslav, Chung Jin Young: An Analysis of Adopting Dual Pricing for Museums: The Case of the National Museum of Iran. *Annals of Tourism Research*, 43(2013), pp. 58-80.

Tkalec Marina, Verbič Miroslav: A New Look Into the Prevalence of Balance Sheet or Competitiveness Effect of Exchange Rate Depreciation in a Highly Euroised Economy. *Post-Communist Economies*, 25(2013), 2, pp. 225-240.

Ogorevc Marko, Verbič Miroslav: Ownership and Wages: Spatial Econometric Approach. *International Journal of Sustainable Economy*, 5(2013), 2, pp. 207-224.

Polanec Sašo, Ahčan Aleš, Verbič Miroslav: Retirement Decisions in Transition: Microeconometric Evidence from Slovenia. *Post-Communist Economies*, 25(2013), 1, pp. 99-118.

Čok Mitja, Sambt Jože, Košak Marko, Verbič Miroslav, Majcen Boris: Distribution of Personal Income Tax Changes in Slovenia. *Post-Communist Economies*, 24(2012), 4, pp. 503-515.

Hommes Cars H., Kiseleva Tatiana, Kuznetsov Yuri A., Verbič Miroslav: Is More Memory in Evolutionary Selection (De)stabilizing? *Macroeconomic Dynamics*, 16(2012), 3, pp. 335-357.

Verbič Miroslav: Memory and Asset Pricing Models with Heterogeneous Beliefs. In: Awrejcewicz Jan, Hagedorn Peter (eds.): *Nonlinearity, Bifurcation and Chaos – Theory and Applications*. Rijeka: InTech, 2012, pp. 313-344.

Majcen Boris, Verbič Miroslav: *A Recursive Dynamic General Equilibrium Model of the Slovenian Economy*. Ljubljana: Institute for Economic Research, 2011.

Verbič Miroslav (ed.): *Advances in Econometrics – Theory and Applications*. Rijeka: InTech, 2011.

Majcen Boris, Verbič Miroslav: The Slovenian Pension System in the Context of Upcoming Demographic Developments. In: Holzmann Robert, MacKellar Landis, Repanšek Jana (eds.): Pension Reform in Southeastern Europe: Linking to Labor and Financial Market Reforms. Washington, DC: World Bank Publications, 2009, pp. 73-87.

Majcen Boris, Verbič Miroslav, Bayar Ali, Čok Mitja: The Income Tax Reform in Slovenia: Should the Flat Tax Have Prevailed? *Eastern European Economics*, 47(2009), 5, pp. 5-24.

Verbič Miroslav: A Note on Varying the Parameters of the Slovenian Pension System: An Analysis of Supplementary Pension Insurance. *Post-Communist Economies*, 21(2009), 3, pp. 373-382.

Verbič Miroslav, Kuzmin Franc: Coefficient of Structural Concordance and an Example of its Application: Labour Productivity and Wages in Slovenia. *Panoeconomicus*, 56(2009), 2, pp. 227-240.

Verbič Miroslav, Slabe-Erker Renata: An Econometric Analysis of Willingness-to-pay for Sustainable Development: A Case Study of the Volčji Potok Landscape Area. *Ecological Economics*, 68(2009), 5, pp. 1316-1328.

Verbič Miroslav: On the Role of Memory in an Asset Pricing Model with Heterogeneous Beliefs. *Financial Theory and Practice*, 32(2008), 2, pp. 195-228.

Verbič Miroslav: Modelling the Pension System in an Overlapping-Generations General Equilibrium Modelling Framework. *Economic and Business Review*, 10(2008), 2, pp. 117-152.

Verbič Miroslav: A Dynamic General Equilibrium Model of the Slovenian Economy with Emphasis on the Pension System. Ljubljana: University of Ljubljana, Faculty of Social Sciences, 2007.

Verbič Miroslav: Varying the Parameters of the Slovenian Pension System: An Analysis with an Overlapping-Generations General Equilibrium Model. *Post-Communist Economies*, 19(2007), 4, pp. 449-470.

Verbič Miroslav, Majcen Boris, van Nieuwkoop Renger: Sustainability of the Slovenian Pension System: An Analysis with an Overlapping-generations General Equilibrium Model. *Eastern European Economics*, 44(2006), 4, pp. 60-81.

Verbič Miroslav: A Quarterly Econometric Model of the Slovenian Economy. *Economic and Business Review*, 8(2006), 3, pp. 215-244.

Verbič Miroslav, Stanovnik Tine: Analysis of Subjective Economic Well-Being in Slovenia. *Eastern European Economics*, 44(2006), 2, pp. 60-70.

Verbič Miroslav: Discussing the Parameters of Preservation of Perishable Goods in a Cold Logistic Chain Model. *Applied Economics*, 38(2006), 2, pp. 137-147.

Verbič Miroslav: Macroeconomic Analysis of Fundamental Relationships of the Slovenian Economy. Ljubljana: Institute for Economic Research, 2005.

Stanovnik Tine, Verbič Miroslav: Wage and Income Inequality in Slovenia, 1993–2002. *Post-Communist Economies*, 17(2005), 3, pp. 381-397.

Majcen Boris, Verbič Miroslav, Knežević Saša: The Effects of Foreign Trade Liberalisation and Financial Flows between Slovenia and the EU after Accession. *Post-Communist Economies*, 17(2005), 2, pp. 251-267.