



Şırnak Üniversitesi

Ekonometri Eğitimi

Yer: Şırnak Üniversitesi İktisadi ve İdari Bilimler Fakültesi

Şırnak Üniversitesi
tarafından **ikinci kez**
düzenlenen uygulamalı
ekonometri eğitimine,
tüm akademisyen ve
lisansüstü öğrenciler
davetlidir.

Zaman Serisi Analizleri (31 Ağustos-3 Eylül 2024)

(Doç. Dr. İbrahim HÜSEYİNİ)

- Birim kök testleri (yapısal kırılmaları dikkate alan ve almayan)
- Eş-bütünleşme testleri (yapısal kırılmaları dikkate alan ve almayan)
- Kısa ve uzun dönem etkileri analiz etme
- Vektör Hata Düzeltme Modeli ve Wald Testi
- Nedensellik testleri
- Etki-tepki ve varyans ayrıştırması analizleri

Not: Eğitimin son günü örnek bir çalışmanın analizleri başından itibaren yapılarak sonuçları bütüncül bir şekilde raporlanacaktır.

Panel Veri Analizleri I ve II (4-7 Eylül 2024)

(Prof. Dr. Şaban NAZLIOĞLU / Doç. Dr. İbrahim HÜSEYİNİ)

- Panel birim kök testleri (birinci ve ikinci nesil)
- Panel eş-bütünleşme testleri (birinci ve ikinci nesil)
- Eş-bütünleşme tahminçileri (yapısal kırılmayı dikkate alan ve almayan)
- Panel nedensellik testleri
- Spesifikasyon testleri

Ders içerikleri için [tıklayınız.](#)

Ücretlendirme

	1-31 Temmuz eken kayıt	1-31 Ağustos Arası kayıt
Zaman serisi analizleri	2.500 TL	3.250 TL
Panel veri analizleri	2.500 TL	3.250 TL

Ödeme Bilgileri

Şırnak Üniversitesi Teknoloji Transfer Ofisi Anonim Şirketi
Halk Bankası Şırnak Şubesi (676) No:10260648
IBAN: TR29 0001 2009 6760 0010 2606 48
(Açıklama olarak -EE-AD SOYAD, T.C. Kimlik Numarası- ibaresinin yazılması zorunludur)

Konaklama

Katılımcılar, Şırnak Üniversitesinin kampüsünde bulunan üniversitemiz konukevinde konaklayabilirler. (Konukevi tel: 0486 216 63 03)

Ön Başvuru İçin [Tıklayınız](#)

Panel Veri Analizi I ve II
Şaban Nazlıoğlu (Pamukkale Üniversitesi)
İbrahim Hüseyini (Şırnak Üniversitesi)

Yazılım: Eviews 12 ve üzeri; GAUSS 24 ve üzeri

Önemli Notlar: Şaban Nazlıoğlu tarafından GAUSS için hazırlanmış olan ve Apteck tarafından tüm kullanıcılarının paylaşımına açılmış olan **TSPDLIB (Econometric Package for Time Series and Panel Data Methods - <https://github.com/aptech/tspdlib/>)** kütüphanesi katılımcılara tanıtılacak ve kütüphanenin pratik kullanımları gösterilecektir. Hem TSPDLIB hem de diğer GAUSS uygulamaları için katılımcıların GAUSS 24 programına sahip olmaları tavsiye edilir. Çünkü, daha önceki sürümlerde bazı fonksiyonlar olmadığı için yazılan kodların çalışmaması problemi ile karşılaşılmaktadır.

Birim Kök/Durağanlık Testleri

Panel Birim Kök Testleri

IPS	Im, K. S., Pesaran, M. H. and Shin, Y. (2003) Testing for unit roots in heterogeneous panels, Journal of Econometrics, 115, 53-74.
MW	Maddala, G. S. and Wu, S. (1999). A comparative study of unit root tests with panel data and a new simple test, Oxford Bulletin of Economics and Statistics, special issue, 631-52.
Choi	Choi, I. (2001) Unit root tests for panel data, Journal of International Money and Finance, 20, 249-72.
PANIC	Bai, J. and Ng, S. (2004) A PANIC attack on unit roots and cointegration, Econometrica, 72, 1127-78. Bai, J., & Ng, S. (2010). Panel unit root tests with cross-section dependence: a further investigation. Econometric Theory, 26(4), 1088-1114.
PANICCA	Westerlund, J., & Larsson, R. (2009). A note on the pooling of individual PANIC unit root tests. Econometric Theory, 25(6), 1851-1868.
CADF & CIPS	Pesaran, M.H. (2007) A simple unit root test in the presence of cross-section dependence, Journal of Applied Econometrics, 22 (2), 265-312.

Panel Durağanlık Testleri

Hadri	Hadri, K. (2000), Testing for Unit Roots in Heterogeneous Panel Data, Econometrics Journal, 3, 148-161.
YW	Yin, Y. and S. Wu (2001), "Stationarity Tests in Heterogeneous Panels," in Badi H. Baltagi, Thomas B. Fomby, R. Carter Hill (ed.) Nonstationary Panels, Panel Cointegration, and Dynamic Panels (Advances in Econometrics, Volume 15) Emerald Group Publishing Limited, pp.275 - 296.
PANIC KPSS	Bai, J., and S. Ng (2005), "A New Look at Panel Testing of Stationarity and the PPP Hypothesis," In: Andrews, D.W.K., Stock, J.H. (Eds.), Identification and Inference for Econometric Models. Essays in Honor of Thomas Rothenberg. Cambridge University Press, Cambridge.
HK	Hadri, K., Kurozumi, E., (2012) A simple panel stationarity test in the presence of serial correlation and a common factor, Economics Letters 115, 31-34.
Extensions	Nazlioglu, S., Payne, J. E., Lee, J., Rayos-Velazquez, M., & Karul, C. (2021). Convergence in OPEC carbon dioxide emissions: Evidence from new panel stationarity tests with factors and breaks. Economic Modelling, 100, 105498.

Yapısal Kırılmalar

LM-level break	Im, K., Lee, J., Tieslau, M. (2005) Panel LM Unit-root Tests with Level Shifts, Oxford Bulletin of Economics and Statistics 67, 393-419. Westelund, J. (2012) Testing for unit roots in panel time-series models with multiple level breaks, The Manchester School Vol 80 No. 6 671-699.
LM-trend break	Lee, J., & Tieslau, M. (2017). Panel LM unit root tests with level and trend shifts. Economic Modelling.
PANIC LM-Break	Bai, J. and Carrion-i-Silvestre, J. L. (2009). Structural changes, common stochastic trends, and unit roots in panel data, Review of Economic Studies, 76, 471-501.
PANIC LM-Fourier	Nazlioglu, S., Lee, J., Tieslau, M., Karul, C., & You, Y. (2023). Smooth structural changes and common factors in nonstationary panel data: an analysis of healthcare expenditures. Econometric Reviews, 42(1), 78-97.
Panel KPSS-Break	Carrion-i-Silvestre, J.L., Del Barrio-Castro, T., Lopez-Bazo, E., (2005) Breaking the panels: An application to GDP per capita, Econometrics Journal, 8, 159-175. Hadri, K., & Rao, Y. (2008). Panel Stationarity Test with Structural Breaks. Oxford Bulletin of Economics and Statistics, 70(2), 245-269.
Panel KPSS-Fourier	Nazlioglu, S., & Karul, C. (2017). A panel stationarity test with gradual structural shifts: Re-investigate the international commodity price shocks. Economic Modelling, 61, 181-192.

New Extensions Nazlioglu, S., Payne, J. E., Lee, J., Rayos-Velazquez, M., & Karul, C. (2021). Convergence in OPEC carbon dioxide emissions: Evidence from new panel stationarity tests with factors and breaks. *Economic Modelling*, 100, 105498.

Eşbütünleşme Testleri

Pedroni Pedroni, P., 1999. Critical values for cointegration tests in heterogeneous panels with multiple regressors. *Oxford Bulletin of Economics and Statistics* 61, 653-670.
Pedroni, P., 2004. Panel cointegration: asymptotic and finite sample properties of pooled time series tests with an application to the PPP hypothesis: new results. *Econometric Theory* 20, 597-627.

LM Westerlund, J., Edgerton, D. L., 2007. A Panel Bootstrap Cointegration Test. *Economics Letters* 97, 185-190.

Durbin-h Westerlund, J., 2008. Panel cointegration tests of the Fisher effect, *Journal of Applied Econometrics* 23, 193-233.

Structural breaks Westerlund, J. (2006) Testing for panel cointegration with a level break, *Economics Letters* 91 (2006) 27-33.
Westerlund, J., 2006. Testing for panel cointegration with multiple structural breaks. *Oxford Bulletin of Economics and Statistics* 68, 101-132.
Westerlund, J., Edgerton, D. L., 2008. A Simple Test for Cointegration in Dependent Panels with Structural Breaks. *Oxford Bulletin of Economics and Statistics* 70, 665-704.

Eşbütünleşme Tahminçileri

Panel ARDL Pesaran, M. H., Shin, Y. and Smith, R. J. (1999), Pooled Mean Group Estimation of Dynamic Heterogeneous Panels, *Journal of the American Statistical Association*, 94, 621-634.

Panel FMOLS Pedroni, P., 2000. Fully modified OLS for heterogeneous cointegrated panels. *Advances in Econometrics* 15, 93-130.

Panel DOLS Pedroni, P., 2001. Purchasing Power Parity Tests in cointegrated panels. *Review of Economics and Statistics* 83, 727-731.

CUP-FM Bai, J., and C. Kao. (2005). "On the Estimation and Inference of a Panel Cointegration Model with Cross-Sectional Dependence." In B. Baltagi (ed.), *Contributions to Economic Analysis*. Amsterdam: Elsevier.

BA-OLS Westerlund, J. (2007) Estimating Cointegrated Panels with Common Factors and the Forward Rate Unbiasedness Hypothesis, *Journal of Financial Econometrics*, 2007, Vol. 5, No. 3, 491-522.

CCE Pesaran, M.H., (2006) Estimation and inference in large heterogeneous panels with a multifactor error structure, *Econometrica*, Vol. 74, No. 4, 967-1012.

IFE Bai, J. 2009. Panel data models with interactive fixed effects. *Econometrica* 77:1229-79.

FAR Greenaway-McGrevy, R., C. Han, and D. Sul. 2012. Asymptotic distribution of factor augmented estimators for panel regression. *Journal of Econometrics* 168:48-53.

Dynamic Models Gaibullov, K., Sandler, T., & Sul, D. (2014). Dynamic panel analysis under cross-sectional dependence. *Political Analysis*, 22(2), 258-273.

Panel Nedensellik

Panel SUR Kónya, L. (2006) Exports and growth: Granger causality analysis on OECD countries with a panel data approach, *Economic Modelling*, 23 (6), pp. 978-992.

Panel Granger Dumitrescu, E., Hurlin, C. (2012) Testing for Granger non-causality in heterogeneous panels, *Economic Modelling* 29 (2012) 1450-1460.

Panel Toda-Yamamoto Emirmahmutoglu, F., Kose, N. (2011) Testing for Granger causality in heterogeneous mixed panels, *Economic Modelling* 28 (2011) 870-876.

Panel PANIC Nazlioglu, S., & Karul, C. (2024). Testing for Granger causality in heterogeneous panels with cross-sectional dependence. *Empirical Economics*, 1-39.

Spesifikasyon Testleri

LM Breusch, T.S. and Pagan, A.R. (1980) The Lagrange multiplier test and its applications to model specification in econometrics, *Review of Econometric Studies*, 47 (1), 239-253.

CD Pesaran, M. H. (2021). General diagnostic tests for cross-sectional dependence in panels. *Empirical Economics*, 60(1), 13-50.

BA-LM Pesaran, M. H., Ullah, A. and Yamagata, T. (2008) A bias-adjusted LM test of error cross-section independence, *Econometrics Journal* 11, 105-127.

Delta Pesaran, M. H., Yamagata, T. (2008) Testing slope homogeneity in large panels, *Journal of Econometrics*, 142(1), pp. 50-93.

Zaman Serisi Analizleri

İbrahim Hüseyini (Şırnak Üniversitesi)

Yazılım: Eviews 12 ve üzeri; GAUSS 24 ve üzeri

Önemli Notlar: Şaban Nazlıoğlu tarafından GAUSS için hazırlanmış olan ve Aptech tarafından tüm kullanıcılarının paylaşımına açılmış olan **TSPDLİB (Econometric Package for Time Series and Panel Data Methods - <https://github.com/aptech/tspdlib/>)** kütüphanesi katılımcılara tanıtılacak ve kütüphanenin pratik kullanımları gösterilecektir. Hem TSPDLİB hem de diğer GAUSS uygulamaları için katılımcıların GAUSS 24 programına sahip olmaları tavsiye edilir. Çünkü, daha önceki sürümlerde bazı fonksiyonlar olmadığı için yazılan kodların çalışmaması problemi ile karşılaşılmaktadır.

Birim Kök/Durağanlık Testleri

Birim Kök Testleri

ADF	Dickey, D. A., & Fuller, W. A. (1981). Likelihood ratio statistics for autoregressive time series with a unit root. <i>Econometrica: journal of the Econometric Society</i> , 1057-1072.
Philips Perron (PP)	Phillips, P. C., & Perron, P. (1988). Testing for a unit root in time series regression. <i>biometrika</i> , 75(2), 335-346.
KPSS	Kwiatkowski, D., Phillips, P. C., Schmidt, P., & Shin, Y. (1992). Testing the null hypothesis of stationarity against the alternative of a unit root: How sure are we that economic time series have a unit root?. <i>Journal of econometrics</i> , 54(1-3), 159-178.

Yapısal Kırılmayı Dikkate Alan Birim Kök Testleri

Zivot & Andrews	Zivot, E., & Andrews, D. W. (1992). Further Evidence on the Great Crash, the Oil-Price Shock, and the Unit-Root Hypothesis. <i>Journal of Business & Economic Statistics</i> , 10(3), 251-270.
Narayan & Popp	Narayan, P. K., & Popp, S. (2010). A new unit root test with two structural breaks in level and slope at unknown time. <i>Journal of Applied Statistics</i> , 37(9), 1425-1438.
Fourier ADF	Enders, W., & Lee, J. (2012). The flexible Fourier form and Dickey-Fuller type unit root tests. <i>Economics Letters</i> , 117(1), 196-199.
Fourier KPSS	Becker, R., Enders, W., & Lee, J. (2006). A stationarity test in the presence of an unknown number of smooth breaks. <i>Journal of Time Series Analysis</i> , 27(3), 381-409.

Eş-bütünleşme Testleri

Eş-bütünleşme Testleri

Engle & Granger	Engle, R. F., & Granger, C. W. (1987). Co-integration and error correction: representation, estimation, and testing. <i>Econometrica: journal of the Econometric Society</i> , 251-276.
Johansen	Johansen, S. (1988). Statistical analysis of cointegration vectors. <i>Journal of economic dynamics and control</i> , 12(2-3), 231-254.

Yapısal Kırılmayı Dikkate Alan Eş-bütünleşme Testleri

Gregory & Hansen	Gregory, A. W., & Hansen, B. E. (1996). Residual-based tests for cointegration in models with regime shifts. <i>Journal of econometrics</i> , 70(1), 99-126.
Hatemi-j	Hatemi-j, A. (2008). Tests for cointegration with two unknown regime shifts with an application to financial market integration. <i>Empirical economics</i> , 35(3), 497-505.
Maki	Maki, D. (2012). Tests for cointegration allowing for an unknown number of breaks. <i>Economic Modelling</i> , 29(5), 2011-2015.
Fourier Johansen	Pascalau, R., Lee, J., Nazlioglu, S., & Lu, Y. (2022). Johansen-type cointegration tests with a Fourier function. <i>Journal of Time Series Analysis</i> , 43(5), 828-852.

Nedensellik

Granger Nedensellik	Granger, C. W. (1980). Testing for causality: A personal viewpoint. <i>Journal of Economic Dynamics and control</i> , 2, 329-352.
Hatemi-j	Hatemi-j, A. (2012). Asymmetric causality tests with an application. <i>Empirical economics</i> , 43, 447-456.
Toda & Yamamoto	Toda, H. Y., & Yamamoto, T. (1995). Statistical inference in vector autoregressions with possibly integrated processes. <i>Journal of econometrics</i> , 66(1-2), 225-250.
Fourier Granger	Nazlioglu, S., Gormus, A., & Soytaş, U. (2019). Oil prices and monetary policy in emerging markets: structural shifts in causal linkages. <i>Emerging Markets Finance and Trade</i> , 55(1), 105-117.
	Enders, W., & Jones, P. (2016). Grain prices, oil prices, and multiple smooth breaks in a VAR. <i>Studies in Nonlinear Dynamics & Econometrics</i> , 20(4), 399-419.

Tahminçiler

DOLS	Stock, J. H., & Watson, M. W. (1993). A simple estimator of cointegrating vectors in higher order integrated systems. <i>Econometrica: journal of the Econometric Society</i> , 783-820
FMOLS	Pedroni, P. (2001). Fully modified OLS for heterogeneous cointegrated panels. In <i>Nonstationary panels, panel cointegration, and dynamic panels</i> (pp. 93-130). Emerald Group Publishing Limited.
CCR	Park, J. Y. (1992). Canonical cointegrating regressions. <i>Econometrica: Journal of the Econometric Society</i> , 119-143.
ARDL	Pesaran, M. H., Shin, Y., & Smith, R. J. (2001). Bounds testing approaches to the analysis of level relationships. <i>Journal of applied econometrics</i> , 16(3), 289-326.