

ETÜ-2026
Uygulamalı Panel Veri Analizi ve Faktör Modelleri
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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 **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

Panel-ADF	Im, K. S., Pesaran, M. H. and Shin, Y. (2003) Testing for unit roots in heterogeneous panels, Journal of Econometrics, 115, 53-74. 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, 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.
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

Panel-KPSS	Hadri, K. (2000), Testing for Unit Roots in Heterogeneous Panel Data, Econometrics Journal, 3, 148-161. 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.
CA-KPSS	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.
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.

Yapısal Kırılmalar

Panel-LM	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. Lee, J., & Tieslau, M. (2017). Panel LM unit root tests with level and trend shifts. Economic Modelling.
PANIC-LM	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- Fourier LM	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	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	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.

Panel Kantil Birim Kök

Quantile CADF & CIPS	Yang, J., Wei, J., & Cai, B. (2022). Quantile unit root inference for panel data with common shocks. <i>Economics Letters</i> , 219, 110809.
Eşbütünleşme Testleri	
Pedroni	Pedroni, P., 1999. Critical values for cointegration tests in heterogeneous panels with multiple regressors. <i>Oxford Bulletin of Economics and Statistics</i> 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. <i>Econometric Theory</i> 20, 597–627.
Panel-LM	Westerlund, J., Edgerton, D. L., 2007. A Panel Bootstrap Cointegration Test. <i>Economics Letters</i> 97, 185–190.
Durbin-h	Westerlund, J., 2008. Panel cointegration tests of the Fisher effect, <i>Journal of Applied Econometrics</i> 23, 193–233.
Structural breaks	Westerlund, J. (2006) Testing for panel cointegration with a level break, <i>Economics Letters</i> 91 (2006) 27–33. Westerlund, J., 2006. Testing for panel cointegration with multiple structural breaks. <i>Oxford Bulletin of Economics and Statistics</i> 68, 101-132. Westerlund, J., Edgerton, D. L., 2008. A Simple Test for Cointegration in Dependent Panels with Structural Breaks. <i>Oxford Bulletin of Economics and Statistics</i> 70, 665-704.
Eşbütünleşme Tahmincileri	
Panel ARDL	Pesaran, M. H., Shin, Y. and Smith, R. J. (1999), Pooled Mean Group Estimation of Dynamic Heterogeneous Panels, <i>Journal of the American Statistical Association</i> , 94, 621–634.
Panel FMOLS	Pedroni, P., 2000. Fully modified OLS for heterogeneous cointegrated panels. <i>Advances in Econometrics</i> 15, 93–130.
Panel DOLS	Pedroni, P., 2001. Purchasing Power Parity Tests in cointegrated panels. <i>Review of Economics and Statistics</i> 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.), <i>Contributions to Economic Analysis</i> . Amsterdam: Elsevier.
BA-OLS	Westerlund, J. (2007) Estimating Cointegrated Panels with Common Factors and the Forward Rate Unbiasedness Hypothesis, <i>Journal of Financial Econometrics</i> , 2007, Vol. 5, No. 3, 491–522.
CCE	Pesaran, M.H., (2006) Estimation and inference in large heterogeneous panels with a multifactor error structure, <i>Econometrica</i> , Vol. 74, No. 4, 967–1012.
IFE	Bai, J. 2009. Panel data models with interactive fixed effects. <i>Econometrica</i> 77:1229–79.
Dynamic Models	Gaibullov, K., Sandler, T., & Sul, D. (2014). Dynamic panel analysis under cross-sectional dependence. <i>Political Analysis</i> , 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, <i>Economic Modelling</i> , 23 (6), pp. 978-992.
Panel Granger	Dumitrescu, E., Hurlin, C. (2012) Testing for Granger non-causality in heterogeneous panels, <i>Economic Modelling</i> 29 (2012) 1450–1460.
Panel Toda-Yamamoto	Emirmahmutoglu, F., Kose, N. (2011) Testing for Granger causality in heterogeneous mixed panels, <i>Economic Modelling</i> 28 (2011) 870–876.
Panel PANIC	Nazlioglu, S., & Karul, C. (2024). Testing for Granger causality in heterogeneous panels with cross-sectional dependence. <i>Empirical Economics</i> , 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, <i>Review of Econometric Studies</i> , 47 (1), 239-253.
CD	Pesaran, M. H. (2021). General diagnostic tests for cross-sectional dependence in panels. <i>Empirical Economics</i> , 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, <i>Econometrics Journal</i> 11, 105–127.
Delta	Pesaran, M. H., Yamagata, T. (2008) Testing slope homogeneity in large panels, <i>Journal of Econometrics</i> , 142(1), pp. 50–93.
Faktör Modelleri	
Statik Faktör Modelleri	Bai, J., and Ng, S. (2002). Determining the number of factors in approximate factor models. <i>Econometrica</i> , 70 (1): 191–221. doi.org/10.1111/1468-0262.00273. Pesaran, M. H. (2006). Estimation and inference in large heterogeneous panels with a multifactor error structure. <i>Econometrica</i> 74(4): 967–1012. https://doi.org/10.1111/j.1468-0262.2006.00692.x
Dinamik Faktör Modelleri	Jackson, L.E., Kose, M.A., Otrok, C., and Owyang, M.T. (2016). Specification and estimation of Bayesian dynamic factor models: A Monte Carlo analysis with an application to global house price comovement. In <i>Dynamic Factor Models</i> , <i>Advanced in Econometrics</i> , 361-400. dx.doi.org/10.1108/S0731-905320150000035009.

