

Assoc. Prof. NİMET ÖZBAY

Personal Information

Office Phone: [+90 322 338 6084](tel:+903223386084) Extension: 2441

Email: nturker@cu.edu.tr

Web: <https://avesis.cu.edu.tr//nturker>

International Researcher IDs

ORCID: 0000-0003-3840-3107

Publons / Web Of Science ResearcherID: B-8835-2018

ScopusID: 57190946740

Yoksis Researcher ID: 190173

Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2013 - 2017

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2011 - 2013

Undergraduate Double Major, Cukurova University, Fen Edebiyat Fakültesi, İstatistik, Turkey 2008 - 2011

Undergraduate, Cukurova University, Fen Edebiyat Fakültesi, Matematik, Turkey 2007 - 2011

Foreign Languages

English, B1 Intermediate

Dissertations

Doctorate, LİNEER REGRESYONDA BAZI YANLI TAHMİN EDİCİLERE BAYESYEN YAKLAŞIM , Cukurova University, Fen Bilimleri Enstitüsü, İstatistik, 2017

Postgraduate, LİNEER REGRESYON MODELİNDE BAYES TAHMİN EDİCİLER, Cukurova University, Fen Bilimleri Enstitüsü, İstatistik, 2013

Research Areas

Statistics, Statistical Analysis and Applications, Natural Sciences

Academic Titles / Tasks

Associate Professor, Cukurova University, Fen-Edebiyat Fakültesi, İstatistik, 2020 - Continues

Assistant Professor, Cukurova University, Fen-Edebiyat Fakültesi, İstatistik, 2019 - Continues

Research Assistant, Cukurova University, Fen-Edebiyat Fakültesi, İstatistik, 2012 - 2019

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **How global warming data are modeled via some novel mathematical programming scenarios in distributed lag model?**
ÖZBAY N., Toker S.
Stochastic Environmental Research and Risk Assessment, 2024 (SCI-Expanded)
- II. **Two-parameter estimation for Tobit model: An application to national health and nutrition examination survey dataset**
ÖZBAY N., ÜSTÜNDAĞ ŞİRAY G., TOKER KUTAY S., Yenilmez I.
CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, vol.34, no.18, 2022 (SCI-Expanded)
- III. **Mixed data sampling regression: Parameter selection of smoothed least squares estimator**
Toker Kutay S., Özbay N., Mansson K.
JOURNAL OF FORECASTING, vol.41, no.4, pp.718-751, 2022 (SCI-Expanded)
- IV. **Comparison of Liu and two parameter principal component estimator to combat multicollinearity**
KAÇIRANLAR S., ÖZBAY N., Ozkan E., GÜLER H.
CONCURRENCY AND COMPUTATION-PRACTICE & EXPERIENCE, vol.34, no.5, 2022 (SCI-Expanded)
- V. **Improving prediction by means of a two parameter approach in linear mixed models**
Kuran Ö., Özbay N.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.91, no.18, pp.3721-3743, 2021 (SCI-Expanded)
- VI. **Restricted estimation of distributed lag model from a Bayesian point of view**
Toker Kutay S., Özbay N.
Communications In Statistics-Theory And Methods, vol.0, pp.1-13, 2021 (SCI-Expanded)
- VII. **Defining a two-parameter estimator: a mathematical programming evidence**
ÜSTÜNDAĞ ŞİRAY G., TOKER KUTAY S., ÖZBAY N.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.91, no.11, pp.2133-2152, 2021 (SCI-Expanded)
- VIII. **A minimum matrix valued risk estimator combining restricted and ordinary least squares estimators**
Mirezi B., Kaçiranlar S., Özbay N.
Communications In Statistics-Theory And Methods, vol.0, pp.1-12, 2021 (SCI-Expanded)
- IX. **Implementation and validation of new optimization methods by genetic algorithm for two-parameter ridge estimator**
Tekeli E., Özbay N., Kaçiranlar S.
Concurrency And Computation-Practice & Experience, vol.33, no.9, pp.1-32, 2021 (SCI-Expanded)
- X. **Tobit Liu estimation of censored regression model: an application to Mroz data and a Monte Carlo simulation study**
TOKER KUTAY S., ÖZBAY N., ÜSTÜNDAĞ ŞİRAY G., Yenilmez I.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.91, no.6, pp.1061-1091, 2021 (SCI-Expanded)
- XI. **Prediction framework in a distributed lag model with a target function: an application to global warming data**
Özbay N., Toker Kutay S.
ENVIRONMENTAL AND ECOLOGICAL STATISTICS, vol.28, no.1, pp.87-134, 2021 (SCI-Expanded)
- XII. **Efficiency of Mansson's method: Some numerical findings about the role of biasing parameter in the estimation of distributed lag model**
ÖZBAY N., TOKER KUTAY S.
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, vol.49, no.9, pp.2333-2346, 2020 (SCI-Expanded)
- XIII. **The effect of target function on the predictive performance of the two-stage ridge estimator**
Toker S., ÖZBAY N.
JOURNAL OF FORECASTING, vol.38, no.8, pp.749-772, 2019 (SSCI)
- XIV. **Optimal determination of the parameters of some biased estimators using genetic algorithm**
TEKELİ E., KAÇIRANLAR S., ÖZBAY N.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.89, no.18, pp.3331-3353, 2019 (SCI-Expanded)
- XV. **Two-Parameter Ridge Estimation for the Coefficients of Almon Distributed Lag Model**
ÖZBAY N.

IRANIAN JOURNAL OF SCIENCE AND TECHNOLOGY TRANSACTION A-SCIENCE, vol.43, pp.1819-1828, 2019 (SCI-Expanded)

- XVI. **Risk performance of some shrinkage estimators**
ÖZBAY N., KAÇIRANLAR S.
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, 2019 (SCI-Expanded)
- XVII. **Multicollinearity in simultaneous equations system: evaluation of estimation performance of two-parameter estimator**
ÖZBAY N., Toker S.
COMPUTATIONAL & APPLIED MATHEMATICS, vol.37, no.4, pp.5334-5357, 2018 (SCI-Expanded)
- XVIII. **Estimation in a linear regression model with stochastic linear restrictions: a new two-parameter-weighted mixed estimator**
ÖZBAY N., KAÇIRANLAR S.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.88, no.9, pp.1669-1683, 2018 (SCI-Expanded)
- XIX. **Improvement of the Liu-type Shiller estimator for distributed lag models**
ÖZBAY N., KAÇIRANLAR S.
JOURNAL OF FORECASTING, vol.36, no.7, pp.776-783, 2017 (SSCI)
- XX. **The Almon two parameter estimator for the distributed lag models**
ÖZBAY N., KAÇIRANLAR S.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.87, no.4, pp.834-843, 2017 (SCI-Expanded)
- XXI. **The feasible generalized restricted ridge regression estimator**
ÖZBAY N., KAÇIRANLAR S., DAWOUD I.
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, vol.87, no.4, pp.753-765, 2017 (SCI-Expanded)
- XXII. **The performance of the adaptive optimal estimator under the extended balanced loss function**
ÖZBAY N., KAÇIRANLAR S.
COMMUNICATIONS IN STATISTICS-THEORY AND METHODS, vol.46, no.22, pp.11315-11326, 2017 (SCI-Expanded)

Articles Published in Other Journals

- I. **Determining the Effect of Some Biasing Parameter Selection Methods for the Two Stage Ridge Regression Estimator**
ÖZBAY N., TOKER KUTAY S.
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, no.22, pp.1878-1885, 2018 (Peer-Reviewed Journal)
- II. **Evaluation of Two Stage Modified Ridge Estimator and Its Performance**
TOKER KUTAY S., ÖZBAY N.
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.22, no.6, pp.1631-1637, 2018 (Peer-Reviewed Journal)
- III. **Feasible Generalized Stein-Rule Restricted Ridge Regression Estimators**
ÖZBAY N., DAWOUD I., KAÇIRANLAR S.
JOURNAL OF APPLIED MATHEMATICS STATISTICS AND INFORMATICS, vol.13, no.1, pp.77-97, 2017 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **On the Predictive Performance of Distributed Lag Model**
ÖZBAY N., TOKER KUTAY S.
20th International Symposium on Econometrics, Operations Research and Statistics (EYİ 2020), Ankara, Turkey, 12 - 14 February 2020
- II. **Liu Estimation for Tobit Regression Model**
TOKER KUTAY S., ÖZBAY N., ÜSTÜNDAĞ ŞİRAY G., YENİLMEZ İ.
20th International Symposium on Econometrics, Operations Research and Statistics (EYİ 2020), Ankara, Turkey, 12 - 14 February 2020

- III. **Two Parameter Ridge Estimator for Simultaneous System: A Mathematical Programming Evidence for Selecting Biasing Parameters**
TOKER KUTAY S., ÖZBAY N.
V. International Congress on Natural and Health Sciences (ICNHS-2019), Adana, Turkey, 13 - 15 December 2019, pp.423-433
- IV. **A BAYESIAN APPROACH TO THE RESTRICTIONS IN ALMON MODEL**
TOKER KUTAY S., ÖZBAY N.
ICOAEF19, VI International Conference on Applied Economics and Finance, Balıkesir, Turkey, 16 - 17 November 2019, pp.54
- V. **Mixed Frequency Estimation by Smoothed Least Squares**
TOKER KUTAY S., ÖZBAY N., Månsson K.
11. INTERNATIONAL STATISTICS CONGRESS (ISC 2019), Muğla, Turkey, 4 - 08 November 2019, pp.101
- VI. **Modified Two Parameter Estimator to Combat Multicollinearity: A Comparative Study**
KAÇIRANLAR S., ÖZBAY N., ÖZKAN E.
11. INTERNATIONAL STATISTICS CONGRESS (ISC 2019), Muğla, Turkey, 4 - 08 November 2019, pp.129
- VII. **Modified Two Parameter Estimator to Combat Multicollinearity: A Comparative Study**
KAÇIRANLAR S., ÖZBAY N., ÖZKAN E.
11. International Statistics Congress (ISC2019), 4 - 08 October 2019
- VIII. **Defining Some Adaptive Optimal Estimators for the Distributed Lag Model**
ÖZBAY N., TOKER KUTAY S.
5th International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2019), Aydın, Turkey, 18 - 20 October 2019
- IX. **Improving Two Stage Two Parameter Ridge Estimator under Linear Restrictions**
TOKER KUTAY S., ÖZBAY N.
5th International Researchers, Statisticians and Young Statisticians Congress, Aydın, Turkey, 18 - 20 October 2019, pp.254-271
- X. **Considering Linear Constraints for Almon Two Parameter Ridge Estimation**
ÖZBAY N., TOKER KUTAY S.
11. INTERNATIONAL STATISTICS CONGRESS (ISC2019), Muğla, Turkey, 4 - 08 October 2019, pp.374-386
- XI. **A Mathematical Programming Procedure for Examining Biasing Parameters of Two Stage Two Parameter Estimator**
TOKER KUTAY S., ÖZBAY N.
11. INTERNATIONAL STATISTICS CONGRESS (ISC2019), Muğla, Turkey, 4 - 08 October 2019, pp.319-327
- XII. **Evaluating New Optimization Methods for Two Parameter Ridge Estimator via Genetic Algorithm**
TEKELİ E., KAÇIRANLAR S., ÖZBAY N.
y-BIS 2019 Conference:Recent Advances In DataScience and Business Analytics, 25 - 28 September 2019
- XIII. **Examination of a two parameter estimator with mathematical programming method**
ÖZBAY N., TOKER KUTAY S., ÜSTÜNDAĞ ŞİRAY G.
International Conference on Mathematics and Mathematics Education (ICMME 2019), Konya, Turkey, 11 - 13 July 2019, pp.203-204
- XIV. **Examination of a two parameter estimator with mathematical programming method**
ÖZBAY N., TOKER KUTAY S., ÜSTÜNDAĞ ŞİRAY G.
International Conference on Mathematics and Mathematics Education (ICMME 2019), Konya, Turkey, 11 - 13 July 2019, pp.203-204
- XV. **Determination of Biasing Parameters for Almon Liu Type Estimator via a Mathematical Programming Approach**
ÖZBAY N., TOKER KUTAY S.
6th International IFS and Contemporary Mathematics Conference (IFSCOM 2019), Mersin, Turkey, 7 - 10 June 2019
- XVI. **İki Aşamalı Liu Tipi Tahmin Edici için Matematiksel Programlama Yaklaşımıyla Parametre Seçimi**
TOKER KUTAY S., ÖZBAY N.

- 4 International Mediterranean SCIENCE AND ENGINEERING CONGRESS (IMSEC 2019), Antalya, Turkey, 25 - 27 April 2019, pp.825-831
- XVII. **Eşanlı Denklemler Modeli için Bazı Uyarlanabilir Optimal Tahmin Edicilerin Tanımlanması**
ÖZBAY N., TOKER KUTAY S.
4 International Mediterranean SCIENCE AND ENGINEERING CONGRESS (IMSEC 2019), Antalya, Turkey, 25 - 27 April 2019, pp.832-838
- XVIII. **INVESTIGATION OF TWO STAGE RIDGE ESTIMATOR UNDER LINEAR CONSTRAINTS**
TOKER KUTAY S., ÖZBAY N.
International Conference on Multidisciplinary Sciences, İstanbul, Turkey, 15 - 16 December 2018, pp.752-764
- XIX. **IMPLEMENTATION OF LINEAR CONSTRAINTS IN DISTRIBUTED LAG MODEL**
ÖZBAY N., TOKER KUTAY S.
International Conference on Multidisciplinary Sciences, İstanbul, Turkey, 15 - 16 December 2018, pp.765-775
- XX. **INVESTIGATION OF TWO STAGE RIDGE ESTIMATOR UNDER LINEAR CONSTRAINTS**
TOKER KUTAY S., ÖZBAY N.
International Conference on Multidisciplinary Sciences, İstanbul, Turkey, 15 - 16 December 2018, pp.752-764
- XXI. **IMPLEMENTATION OF LINEAR CONSTRAINTS IN DISTRIBUTED LAG MODEL**
ÖZBAY N., TOKER KUTAY S.
International Conference on Multidisciplinary Sciences, İstanbul, Turkey, 15 - 16 December 2018, pp.765-775
- XXII. **Almon Modelinde Çapraz Geçerlilik Kriterinin Kullanımı ile Ridge ve Liu Tahmin Edicilerin Ön Tahmin Performansının Geliştirilmesi**
ÖZBAY N., TOKER KUTAY S.
3rd International Mediterranean Science and Engineering Congress (IMSEC2018), Adana, Turkey, 24 - 26 October 2018, pp.651-654
- XXIII. **İki Aşamalı İki Parametrelili Ridge Tahmin Edicinin Performansını Değerlendirmede Çapraz Geçerlilik Kriterinin Kullanılması**
TOKER KUTAY S., ÖZBAY N.
3rd International Mediterranean Science and Engineering Congress (IMSEC2018), Adana, Turkey, 24 - 26 October 2018, pp.1010-1016
- XXIV. **İki Aşamalı İki Parametrelili Ridge Tahmin Edicinin Performansını Değerlendirmede Çapraz Geçerlilik Kriterinin Kullanılması**
TOKER KUTAY S., ÖZBAY N.
3rd International Mediterranean Science and Engineering Congress (IMSEC2018), Adana, Turkey, 24 - 26 October 2018, pp.1010-1016
- XXV. **Almon Modelinde Çapraz Geçerlilik Kriterinin Kullanımı ile Ridge ve Liu Tahmin Edicilerin Ön Tahmin Performansının Geliştirilmesi**
ÖZBAY N., TOKER KUTAY S.
3rd International Mediterranean Science and Engineering Congress (IMSEC2018), Adana, Turkey, 24 - 26 October 2018, pp.651-654
- XXVI. **Evaluating Some Two Stage Ridge Regression Parameters: A Monte Carlo Evidence**
ÖZBAY N., TOKER KUTAY S.
7th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA 2018), Kiev, Ukraine, 28 - 31 August 2018
- XXVII. **The Prediction of a Simultaneous Equations Model by Utilizing Biased Estimation Techniques**
TOKER KUTAY S., ÖZBAY N.
7th International Eurasian Conference on Mathematical Sciences and Applications (IECMSA 2018), Kiev, Ukraine, 28 - 31 August 2018
- XXVIII. **Investigation of Risk Performances of the New Heterogeneous Estimators**
KAÇIRANLAR S., ÖZBAY N.
4th International Conference on Advances in Statistics, Russia, 11 - 13 May 2018
- XXIX. **EXAMINATION ON THE PERFORMANCE OF SOME BIASING PARAMETERS FOR SHILLER'S ESTIMATOR IN DISTRIBUTED LAG MODEL**

- ÖZBAY N., TOKER KUTAY S.
4th International researchers, Statisticians and Young Statisticians Congress (IRSYSC2018), İzmir, Turkey, 28 - 30 April 2018, pp.74
- XXX. **ASSESSING THE PERFORMANCE OF MODIFIED RIDGE ESTIMATOR IN SIMULTANEOUS SYSTEMS**
TOKER KUTAY S., ÖZBAY N.
4th International researchers, Statisticians and Young Statisticians Congress (IRSYSC2018), İzmir, Turkey, 28 - 30 April 2018, pp.77
- XXXI. **Bayesian Estimation of Simultaneous Equations Model in the Existence of Multicollinearity**
TOKER S., ÖZBAY N.
18th International Symposium on Econometrics, Operations Research and Statistics (EYİ 2017), Trabzon, Turkey, 5 - 07 October 2017
- XXXII. **Implementation of the Feasible Generalized Restricted Ridge Estimator to Some Stein-rule Estimators**
ÖZBAY N., Dawoud I., KAÇIRANLAR S.
international conference on applied analysis and mathematical modeling (ICAAMM), 3 - 07 July 2017
- XXXIII. **Assessment of Two Parameter Estimator at the Second Stage via a Monte Carlo Experiment**
ÖZBAY N., TOKER CİNLİ S.
INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELING, İstanbul, Turkey, 3 - 07 July 2017, pp.113
- XXXIV. **Assessment of Two Parameter Estimator at the Second Stage via a Monte Carlo Experiment**
ÖZBAY N., TOKER CİNLİ S.
INTERNATIONAL CONFERENCE ON APPLIED ANALYSIS AND MATHEMATICAL MODELING, İstanbul, Turkey, 3 - 07 July 2017, pp.113
- XXXV. **Two parameter weighted mixed estimator” International researchers**
KAÇIRANLAR S., ÖZBAY N.
Statisticians and Young Statisticians Congress (IRSYSC), 24 - 26 May 2017
- XXXVI. **Two parameter weighted mixed estimator**
KAÇIRANLAR S., ÖZBAY N.
International researchers, Statisticians and Young Statisticians Congress, Konya, Turkey, 24 - 26 May 2017, pp.1
- XXXVII. **Two parameter weighted mixed estimator**
KAÇIRANLAR S., ÖZBAY N.
International researchers, Statisticians and Young Statisticians Congress (IRSYSC), Konya, Turkey, 24 - 26 May 2017, pp.1
- XXXVIII. **Estimation in finite distributed lag models A new biased estimator of the unknown lag coefficient**
ÖZBAY N., KAÇIRANLAR S.
X.INTERNATIONAL STATISTICS DAYS CONFERENCE, 7 - 09 October 2016
- XXXIX. **THE PERFORMANCE OF THE ADAPTIVE OPTIMAL ESTIMATOR**
ÖZBAY N., KAÇIRANLAR S.
9. International Statistics Symposium, 28 October - 01 November 2015
- XL. **Uyarlanmış Optimal Tahmin Edicinin Performansı**
ÖZBAY N., KAÇIRANLAR S.
9. Uluslararası İstatistik Kongresi, 28 October - 01 November 2015
- XLI. **UYARLANMIŞ OPTİMAL TAHMİN EDİCİNİN PERFORMANSI**
ÖZBAY N., KAÇIRANLAR S.
9. Uluslararası İstatistik Kongresi, Antalya, Turkey, 28 October - 01 November 2015, pp.128-129
- XLII. **UYARLANMIŞ OPTİMAL TAHMİN EDİCİNİN PERFORMANSI**
ÖZBAY N., KAÇIRANLAR S.
9. Uluslararası İstatistik Kongresi, Antalya, Turkey, 28 October - 01 November 2015, pp.128-129
- XLIII. **Gecikmesi Dağıtılmış Modellerde Bayesyen Liu ve Ridge Tipi Tahmin Edicilerin Karşılaştırılması**
ÖZBAY N., GÜLTAY B., KAÇIRANLAR S.
Uluslararası 8. İstatistik Kongresi, Antalya, Turkey, 27 - 30 October 2013, pp.269-270

XLIV. Gecikmesi Dağıtılmış Modellerde Bayesyen Liu ve Ridge Tipi Tahmin Edicilerin Karşılaştırılması

ÖZBAY N., GÜLTAY B., KAÇIRANLAR S.

Uluslararası 8. İstatistik Kongresi, Antalya, Turkey, 27 - 30 October 2013, pp.269-270

Supported Projects

TOKER KUTAY S., ÖZBAY N., Project Supported by Higher Education Institutions, Determining Some Estimation and Parameter Selection Approaches for the Model of Simultaneous Equations, 2019 - 2020

TOKER KUTAY S., ÖZBAY N., Project Supported by Higher Education Institutions, New Bayesian and Non-bayesian Estimation Methods in Simultaneous Systems, 2018 - 2019

ÖZBAY N., TOKER CİNLİ S., Project Supported by Higher Education Institutions, Evaluation of parameter estimation by theoretical and computational methods in distributed lag models, 2018 - 2019

TOKER KUTAY S., ÖZBAY N., Project Supported by Higher Education Institutions, Bayesian Estimation of Simultaneous Equations Model in the Existence of Multicollinearity, 2017 - 2018

ÖZBAY N., KAÇIRANLAR S., DAWOUD I., Project Supported by Higher Education Institutions, Implementation of the Feasible Generalized Restricted Ridge Estimator to Some Steinrule Estimators, 2017 - 2018

KAÇIRANLAR S., ÖZBAY N., Project Supported by Higher Education Institutions, Tahmin Edicilere Bayesyen Yaklaşım ve Karşılaştırmalar, 2015 - 2017

Metrics

Publication: 70

Citation (WoS): 37

Citation (Scopus): 53

H-Index (WoS): 3

H-Index (Scopus): 5

Congress and Symposium Activities

XVIII. Uluslararası Ekonometri, Yöneylem Araştırması ve İstatistik Sempozyumu 2017, Attendee, Trabzon, Turkey, 2017

ICAAMM2017, Attendee, İstanbul, Turkey, 2017

IRSYSC2017, Attendee, Konya, Turkey, 2017

Xth International Statistics Days Conference, Attendee, Giresun, Turkey, 2016

İSTKON9, Attendee, Antalya, Turkey, 2015

İSTKON 8, Attendee, ANTALYA/KEMER, Turkey, 2013

Scholarships

TÜBİTAK 2211-E DOĞRUDAN YURT İÇİ DOKTORA BURS PROGRAMI, TUBITAK, 2013 - Continues

TÜBİTAK 2210-A YURT İÇİ GENEL YÜKSEK LİSANS BURS PROGRAMI, TUBITAK, 2011 - Continues