

## Asst. Prof. SELMA TOKER KUTAY

### Personal Information

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### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2011 - 2015

Post Graduate, Cukurova University, Fen Bilimleri Enstitüsü, İstatistik, Turkey 2008 - 2011

Undergraduate Double Major, Cukurova University, Fen Edebiyat Fakültesi, İstatistik, Turkey 2005 - 2008

Under Graduate, Cukurova University, Fen Edebiyat Fakültesi, Matematik, Turkey 2004 - 2008

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, IMPROVED ESTIMATORS IN SIMULTANEOUS EQUATIONS MODEL, Cukurova University, Fen Edebiyat Fakültesi , İstatistik Bölümü, 2015

Post Graduate, Ridge Regression Estimator and Related Estimators, Cukurova University, Fen Bilimleri Enstitüsü, İstatistik Anabilim Dalı, 2011

### Research Areas

Statistics, Statistical Analysis and Applications, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Cukurova University, Fen Edebiyat Fakültesi , İstatistik Bölümü, 2016 - Continues

Research Assistant PhD, Cukurova University, Fen Edebiyat Fakültesi , İstatistik Bölümü, 2015 - Continues

Research Assistant, Cukurova University, Fen Edebiyat Fakültesi, İstatistik, 2008 - Continues

### Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Tobit Liu estimation of censored regression model: an application to Mroz data and a Monte Carlo simulation study**  
TOKER KUTAY S., ÖZBAY N., ÜSTÜNDAĞ ŞIRAY G., Yenilmez I.  
JOURNAL OF STATISTICAL COMPUTATION AND SIMULATION, 2020 (Journal Indexed in SCI)
- II. **Investigating the two parameter analysis of Lipovetsky for simultaneous systems**  
TOKER KUTAY S.

STATISTICAL PAPERS, vol.61, pp.2059-2089, 2020 (Journal Indexed in SCI)

- III. **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, pp.2333-2346, 2020 (Journal Indexed in SCI)
- IV. **The effect of target function on the predictive performance of the two-stage ridge estimator**  
Toker S., ÖZBAY N.  
JOURNAL OF FORECASTING, vol.38, pp.749-772, 2019 (Journal Indexed in SSCI)
- V. **Multicollinearity in simultaneous equations system: evaluation of estimation performance of two-parameter estimator**  
ÖZBAY N., Toker S.  
COMPUTATIONAL & APPLIED MATHEMATICS, vol.37, pp.5334-5357, 2018 (Journal Indexed in SCI)
- VI. **Robust two parameter ridge M-estimator for linear regression**  
Ertaş H., Toker S., KAÇIRANLAR S.  
JOURNAL OF APPLIED STATISTICS, vol.42, pp.1490-1502, 2015 (Journal Indexed in SCI)
- VII. **On the Restricted Liu Estimator in the Logistic Regression Model**  
Siray G. U. , Toker S., KAÇIRANLAR S.  
COMMUNICATIONS IN STATISTICS-SIMULATION AND COMPUTATION, vol.44, pp.217-232, 2015 (Journal Indexed in SCI)
- VIII. **RESTRICTED TWO PARAMETER RIDGE ESTIMATOR**  
Siray G., Toker S.  
AUSTRALIAN & NEW ZEALAND JOURNAL OF STATISTICS, vol.55, pp.455-469, 2013 (Journal Indexed in SCI)
- IX. **Inequality constrained ridge regression estimator**  
Toker S., Siray G., KAÇIRANLAR S.  
STATISTICS & PROBABILITY LETTERS, vol.83, pp.2391-2398, 2013 (Journal Indexed in SCI)
- X. **On the performance of two parameter ridge estimator under the mean square error criterion**  
Toker S., KAÇIRANLAR S.  
APPLIED MATHEMATICS AND COMPUTATION, vol.219, pp.4718-4728, 2013 (Journal Indexed in SCI)

## 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.6, pp.1878-1885, 2018 (Refereed Journals of Other Institutions)
- II. **Evaluation of Two Stage Modified Ridge Estimator and Its Performance**  
TOKER KUTAY S., ÖZBAY N.  
SAKARYA UNIVERSITY JOURNAL OF SCIENCE, vol.22, pp.1631-1637, 2018 (International Refereed University Journal)

## Refereed Congress / Symposium Publications in Proceedings

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

- 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. **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
- VII. **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
- VIII. **Developing a First Order Two Parameter Estimator for Generalized Linear Model**  
Toker Kutay S., Üstündağ Şiray G., Qasim M.  
11th International Statistics Congress, Muğla, Turkey, 4 - 08 October 2019, pp.987-1001
- IX. **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
- X. **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
- XI. **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
- XII. **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
- XIII. **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
- XIV. **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
- XV. **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

- XVI. **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
- XVII. **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
- XVIII. **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
- XIX. **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
- XX. **Biased estimators in simultaneous equations model**  
TOKER S., KAÇIRANLAR S., Güler H.  
? 1. International Mediterranean science and engineering congress(IMSEC 2016), Adana, Turkey, 26 - 28 October 2016, pp.1
- XXI. **Selection Methods of the parameter k for Two Parameter Ridge Estimator**  
TOKER S., ERTAŞ H., KAÇIRANLAR S.  
16th International Symposium on Econometrics, Operations Research and Statistics, Edirne, Turkey, 7 - 12 May 2015, pp.1
- XXII. **A Survey of Liu Estimator**  
KAÇIRANLAR S., SAKALLIOĞLU S., TOKER S.  
3. International Eurasian Conference on Mathematical sciences and Applications, IECMSA-2014, Vienna, Austria, 25 - 28 August 2014, pp.1
- XXIII. **Ridge estimator with Correlated errors under Inequality Restrictions**  
TOKER S., KAÇIRANLAR S.  
International Eurasian Conference on Mathematical sciences and Applications, IECMSA-2014, Vienna, Austria, 25 - 28 August 2014, pp.1
- XXIV. **A New Restricted Estimator**  
ÜSTÜNDAĞ ŞİRAY G., TOKER S.  
International 8th Statistics Congress, Antalya, Turkey, 27 - 30 October 2013, pp.110-111
- XXV. **A New Two Parameter Robust-Ridge Estimator Based On M-Estimator**  
ERTAŞ H., TOKER S., KAÇIRANLAR S.  
14th International Conference on Econometrics, Operations Research and Statistics, Bosna-Hersek, 2013., Sarajova, Bosnia And Herzegovina, 24 - 28 May 2013, pp.362
- XXVI. **Inequality Constrained Ridge Regression Estimation**  
TOKER S., ÜSTÜNDAĞ ŞİRAY G., KAÇIRANLAR S.  
14th International Symposium On Econometrics, Operations Research and Statistics, Sarajevo, Bosnia And Herzegovina, 24 - 28 May 2013, pp.339
- XXVII. **On the restricted Liu estimator for the logistic regression model**  
Siray G. U. , TOKER S., KAÇIRANLAR S., ÜSTÜNDAĞ ŞİRAY G.  
8. Uluslararası İstatistik Günleri Sempozyumu, Eskişehir, Turkey, 11 - 13 October 2012, pp.1
- XXVIII. **İki parametrelili ridge tahmin edici ve bazı karşılaştırmalar**  
TOKER S., KAÇIRANLAR S.  
19. İstatistik Araştırma Sempozyumu 2010, Ankara, Turkey, 6 - 07 May 2010, pp.1

## Supported Projects

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

KAÇIRANLAR S., TOKER S., Project Supported by Higher Education Institutions, IMPROVED ESTIMATORS IN THE SIMULTANEOUS EQUATIONS MODEL, 2015 - 2015

KAÇIRANLAR S., TOKER S., Project Supported by Higher Education Institutions, . TOKER,S.; KAÇIRANLAR, S. (2013) On the performance of two parameter ridge estimator under the mean square error criterion. Applied Mathematics and Computation. 219, 4718-4728., 2014 - 2015

KAÇIRANLAR S., TOKER S., SAKALLIOĞLU S., Project Supported by Higher Education Institutions, A SURVEY OF LIU ESTIMATOR, 2014 - 2015

## Citations

Total Citations (WOS):35

h-index (WOS):3