

Volkan Soner ÖZSOY, Ph.D

Present Address

Department of Finance, Banking, and Insurance
Aksaray University, 68400
Aksaray, Turkey

e-mail: volkansonerzsoy@aksaray.edu.tr
volkansoner1@gmail.com
Phone: +90 (382) 288-3811

Education

Gazi University **Ankara, Turkey**
Ph.D. Department of Statistics, Operations Research Oct 2019
Dissertation title: Bootstrap Approach in Dynamic Network Data Envelopment Analysis Models
Minors: Bootstrap, DEA, Simulation
Advisor: Prof. Dr. Hasan BAL

Gazi University **Ankara, Turkey**
M.Sc. Department of Statistics, Operations Research Sep 2012
Dissertation title: New Decision Support System for Performance Analysis
Minors: Computer Science, Data Envelopment Analysis, Performance Analysis
Advisor: Prof. Dr. Ihsan ALP

Karadeniz Technical University **Trabzon, Turkey**
B.Sc. Department of Statistics and Computer Science Jun 2010

Appointments

Aksaray University, **Aksaray, Turkey**
Department of Finance, Banking, and Insurance
Assistant Profesör Dec 2019 - present

Gazi University, Department of Statistics **Ankara, Turkey**
Research Assistant Jun 2013 - Dec 2019

Nigde University, Department of Statistics **Nigde, Turkey**
Research Assistant Jan 2012 - Jan 2013

The Ministry of Family and Social Policies **Turkey**
Directorate General for Social Aids, Social Assistance and Solidarity Foundation
Assistant Expert Sep 2011 - Jan 2012

Special Trainings

Big Data Analysis **Ankara, Turkey**
Havelsan Co. Jun 2018

English Language Education **İstanbul, Turkey**
Marmara University Mar 2013 - Oct 2013

Project Cycle Management (PCM) **Ankara, Turkey**
Ministry of European Union & Gazi University Nov 2011 - Dec 2011

Courses Taught

SPSS, AMOS, MAXQDA Courses **Kahramanmaraş, Turkey**
Scale, Reliability and Qualitative Research Methods
Kahramanmaraş Sütçü İmam University Jun 2019

Microsoft Office Programs Courses **Ankara, Turkey**
Statistical Consulting, Training, Practice and Research Center (İDEAM)
Gazi University Apr 2019

Research Interests	Methodologies: Big Data, Machine Learning, Performance Analysis, Operations Research, Optimization, Simulation, Bootstrap, Data Mining Applications: SPSS, Visual Studio C#, MATLAB, AMOS, DEAP, R, L ^A T _E X, SPSS Clementine (IBM Modeler)
Journal Publications	<ol style="list-style-type: none"> 1. Özsoy, V.S., Örkücü, H.H. (2021) Structural and operational management of Turkish airports: a bootstrap data envelopment analysis of efficiency. <i>Utilities Policy</i>, 69, 101180. (indexed in SSCI). 2. Özsoy, V.S., Örkücü, M., Örkücü, H.H. (2021). A minimax approach for selecting the overall and stage-level most efficient unit in two stage production processes. <i>Annals of Operations Research</i>. (indexed in SCI-Exp.). 3. Özsoy, V.S., (2021). The determination of the most suitable inertia weight strategy for Particle Swarm Optimization via the minimax mixed-integer linear programming model, <i>Engineering Computations</i>. (indexed in SCI-Exp.). 4. Özsoy, V.S., Örkücü, H.H., Örkücü, M. (2021). A simplistic approach without epsilon to choose the most efficient unit in data envelopment analysis. <i>Expert Systems with Applications</i>, 54(4), 1215-1230. (indexed in SCI-Exp.). 5. Küçük, A., Demirci, M., Kerman, G., Özsoy, V.S. (2021). Evaluating of Hospital Appointment Systems in Turkey: Challenges and Opportunities. <i>Health Policy and Technology</i>, 10(1), 69-74. (indexed in SSCI). 6. Muvingi, J., Peer A., Lotfi, F.H. Özsoy, V.S.. (2021). Hierarchical Groups DEA Cross-efficiency and TOPSIS technique: An application on mobile money agents locations. <i>International Journal of Mathematics in Operational Research</i>. (indexed in ESCI). 7. Özsoy, V.S., Doğan, M.İ. (2021). Which Universities Use Their Spaces Efficiently? Efficiency Analysis of the Public University in Turkey. <i>Journal of Polytechnic</i>, (in press). (indexed in ESCI). 8. Özsoy, V.S., Ünsal, M.G. Örkücü, H.H. (2020). Use of the heuristic optimization in the parameter estimation of generalized gamma distribution: comparison of GA, DE, PSO and SA methods. <i>Computational Statistics</i>, 35, 1895–1925. (indexed in SCI-Exp.). 9. Örkücü, M., Özsoy, V.S., Örkücü, H.H. (2020). An Optimistic-Pessimistic DEA Model Based on Game Cross Efficiency Approach. <i>RAIRO Operations Research</i>, 54(4), 1215-1230. (indexed in SCI-Exp.). 10. Küçük, A., Özsoy, V.S., Balkan, D. (2020) Assessment of Technical Efficiency of Public Hospitals in Turkey. <i>European Journal of Public Health</i>, 30(2), 230-235. (indexed in SSCI). 11. Özsoy, V.S., Örkücü, M., Örkücü, H.H. (2020). The most efficient supplier selection with mixed-integer two-stage data envelopment analysis model. <i>Pamukkale University Journal of Engineering Sciences</i>, 26(4), 758-767. (indexed in ESCI). 12. Yavuzaslanoglu, E., Özsoy, V.S. (2020). Resistance reactions of onion landraces collected from Turkey to the stem and bulb nematode <i>Ditylenchus dipsaci</i>. <i>Mediterranean Agricultural Sciences</i>, 33(2), 195-199. (indexed in WoS)

13. Örkücü, H.H., **Özsoy, V.S.**, Örkücü, M., Bal, H. (2019). A neutral cross efficiency approach for basic two stage production systems. *Expert Systems with Applications*, 125, 333-344. (indexed in SCI-Exp.).
14. Yavuzaslanoglu, E., Sonmezoglu, O., Genc, N., Akar, Z., Ocal, A., Karaca, M., Elekcioglu, I., **Özsoy, V.S.**, & Aydogdu, M. (2019). Occurrence and abundance of nematodes on onion in Turkey and their relationship with soil physicochemical properties, *Nematology*, 21(10), 1063-1079. (indexed in SCI-Exp.).
15. Alp, İ., **Özsoy, V.S.** (2019). A New Robust Bootstrap Algorithm for Assessment of Common Set of Weights in Performance Analysis. *Iranian Journal of Management Studies*. (indexed in ESCI).
16. **Özsoy, V.S.**, Örkücü, H.H., Bal, H. (2018). Particle Swarm Optimization Applied to Parameter Estimation of the Four-Parameter Burr III Distribution. *Iranian Journal of Science and Technology, Transactions A: Science*, 42(2), 895-909. (indexed in SCI-Exp.).
17. Alp, İ., **Özsoy, V.S.** (2017). Two Stage Approach for the Performances of Teams in Football Using Data Envelopment Analysis. *Gazi University Journal of Science*, 30(3), 195-208. (indexed in ESCI).
18. **Özsoy, V.S.**, Örkücü, H.H. (2016). Estimating the Parameters of Nonlinear Regression Models Through Particle Swarm Optimization. *Gazi University Journal of Science*, 29(1), 187-199. (indexed in ESCI).
19. Bal, H. & **Özsoy, V.S.** (2016). Selecting DEA model specifications and ranking units via principal component analysis: an application of economic performance of cities. *Dumlupınar University Journal of Social Sciences*, 125-135.
20. Örkücü, H.H., **Özsoy, V.S.**, Aksoy, E., Doğan, M. I. (2015). Estimating the parameters of 3-p Weibull distribution using particle swarm optimization: A comprehensive experimental comparison. *Applied Mathematics and Computation*, 268, 201-226. (indexed in SCI-Exp.).

Papers Under Review

21. **Özsoy, V.S.**, Belgin, Ö., Balkan, D. (2022) A Novel approach for determining common weights in two division network DEA to evaluate the efficiency of Science and Technology Parks in Turkey. *Technology Analysis & Strategic Management*. (indexed in SCI-Exp.).
22. Hamurcu, C., Oner, M.H., **Özsoy, V.S.** (2022) The Impact of Covid-19 Pandemic on Islamic Index in Turkey: A Behavioral Finance Approach. *International Journal of Islamic and Middle Eastern Finance and Management*. (indexed in SSCI).
23. **Özsoy, V.S.**, Doğan, M. I., Örkücü, H.H. (2022) Performance Management of OECD Countries on Covid-19 Pandemic: A Criticism using Data Envelopment Analysis Models. *Journal of Facilities Management*. (indexed in ESCI).

Book Chapters

Özsoy, V.S., (2018). "Network Data Envelopment Analysis", *Current Topics in Quantitative Decision Methods: Theory and Practice*, ISBN:978-605-344-767-2, Page 15-30.

Citations

Cited work: Örkücü, H.H., Özsoy, V.S., Örkücü, M., Bal, H. (2019). A neutral cross efficiency approach for basic two stage production systems. *Expert Systems with Applications*. (indexed in SCI).

Cited By

1. Chen, L., Wang, S. H., & Wang, Y. M. (2020). A new data envelopment analysis clustering approach within cross-efficiency framework. *Journal of the Operational Research Society*, 1-10. DOI: 10.1080/01605682.2020.1857667 (indexed in SSCI).
2. Amin, G. R., & Hajjami, M. (2020). Improving DEA Cross-efficiency optimization in portfolio selection. *Expert Systems with Applications*, 114280. (indexed in SCI-Exp.).
3. Wang, L., Zhou, Z., Yang, Y., & Wu, J. (2020). Green efficiency evaluation and improvement of Chinese ports: A cross-efficiency model. *Transportation Research Part D: Transport and Environment*, 88, 102590. (indexed in SCI-Exp.).
4. Shi, H. L., Chen, S. Q., Chen, L., & Wang, Y. M. (2020). A neutral cross-efficiency evaluation method based on interval reference points in consideration of bounded rational behavior. *European Journal of Operational Research*. (indexed in SCI).
5. Henriques, I. C., Sobreiro, V. A., Kimura, H., & Mariano, E. B. (2020). Two-Stage DEA in Banks: Terminological Controversies and Future Directions. *Expert Systems with Applications*, 113632. DOI: 10.1016/j.eswa.2020.113632 (indexed in SCI-Exp.).
6. Ding, L., Yang, Y., Wang, L., & Calin, A. C. (2020). Cross Efficiency Assessment of China's marine economy under environmental governance. *Ocean & Coastal Management*, 193, 105245. DOI: 10.1016/j.ocecoaman.2020.105245 (indexed in SCI-Exp.).
7. Behdani, Z. & Darehmiraki, M. (2019) An Alternative Approach to Rank Efficient DMUs in DEA via Cross-Efficiency Evaluation, Gini Coefficient, and Bonferroni Mean. *Journal of the Operations Research Society of China*. DOI: 10.1007/s40305-019-00264-x (indexed in ESCI).
8. Ding, L., Yang, Y., Wang, W., Calin, A.C. (2019). Regional carbon emission efficiency and its dynamic evolution in China: A novel cross efficiency-malmquist productivity index. *Journal of Cleaner Production*. (indexed in SCI-Expanded).
9. Chen, J. X. (2019). Promoting Balance in Output Efficiencies for Cross-Efficiency Evaluation in Data Envelopment Analysis. *Journal of Applied Mathematics and Physics*, 7(03), 664. DOI: 10.4236/jamp.2019.73047

Cited work: Özsoy, V.S., Örkücü, H. H., & Bal, H. (2018). Particle Swarm Optimization Applied to Parameter Estimation of the Four-Parameter Burr III Distribution. *Iranian Journal of Science and Technology, Transactions A: Science*, 42(2), 895-909. (indexed in SCI).

Cited By

1. Yonar, A., & Pehlivan, N. Y. Artificial Bee Colony with Levy Flights for Parameter Estimation of 3-p Weibull Distribution. *Iran J Sci Technol Trans Sci* (2020). DOI: 10.1007/s40995-020-00886-4

2. Lu, Z., Dong, L., & Zhou, J. (2019). Nonlinear Least Squares Estimation for Parameters of Mixed Weibull Distributions by Using Particle Swarm Optimization. *IEEE Access*, 7, 60545-60554.
3. Qiu, Y., & Jiang, S. (2019). Suppression of low-frequency vibration for rotor-bearing system of flywheel energy storage system. *Mechanical Systems and Signal Processing*, 121, 496-508. **(indexed in SCI)**.
4. Rashid, H., Siam, F.M., & Maan, N., (2018). Parameter Estimation for a Model of Ionizing Radiation Effects on Targeted Cells using Genetic Algorithm and Pattern Search Method. *MATEMATIKA*, SI, 1-13. **(indexed in ESCI)**.

Cited work:

Özsoy, V.S., & Örkücü, H. H. (2016). Estimating the Parameters of Nonlinear Regression Models Through Particle Swarm Optimization. *Gazi University Journal of Science*, 29(1), 187-199. **(indexed in ESCI)**.

Cited By

1. Makade, R. G., Chakrabarti, S., & Jamil, B. (2020). Real-time estimation and prediction of the mortality caused due to COVID-19 using particle swarm optimization and finding the most influential parameter. *Infectious Disease Modelling*. DOI: 10.1016/j.idm.2020.09.003 (indexed in ESCI).
2. Ivanov H., Anagnostopoulos C., Kolomvatsos K. (2020) In-Network Machine Learning Predictive Analytics: A Swarm Intelligence Approach. In: Mastorakis G., Mavromoustakis C., Batalla J., Pallis E. (eds) *Convergence of Artificial Intelligence and the Internet of Things*. Internet of Things (Technology, Communications and Computing). Springer, Cham. DOI: 10.1007/978-3-030-44907-07
3. Polatoğlu, İ., Aydın, L., Nevruz, B. Ç., & Özer, S. (2020). A Novel Approach for the Optimal Design of a Biosensor. *Analytical Letters*, 53:9, 1428-1445. DOI: 10.1080/00032719.2019.1709075 (indexed in SCI).
4. Bagchi, J., & Si, T. (2020). Nonlinear Regression Analysis Using Multi-Verse Optimizer. *arXiv preprint arXiv:2005.10642*.
5. Al Marsoomi, I. M., & Aboudi, E. H. (2020). Comparing traditional estimators and the estimators of (PSO) algorithm for some growth models of gross domestic product in Iraq. *Periodicals of Engineering and Natural Sciences*, 8(1), 491-507. (indexed in Scopus).
6. Ahmad A.A., Sarı, M. (2019). Parameter Estimation to an Anemia Model using The Particle Swarm Optimization. *Sigma Journal of Engineering and Natural Sciences*, 37(4), 1331-1343. (indexed in ESCI).
7. Mortazavi, A., Toğan, V., Daloğlu, A., & Nunhoğlu, A. (2018). Comparison of Two Metaheuristic Algorithms on Sizing and Topology Optimization of Trusses and Mathematical Functions. *Gazi University Journal of Science*, 31(2), 416-435. (indexed in ESCI).
8. Jasim Hassan Lazem Sabah Manfi Reza (2018). Comparison of Some Artificial Intelligence Algorithms with the Two Non-Linear Least Squares Method and the Maximum Likelihood Method of Estimating the Ratkowsky Model Using Simulation. *Journal of Al-Rafidain University Faculty of Science*, 43, 126-150.
9. Jalal, L. (2018) *Quality of Experience Methods and Models for Multi-Sensorial Media*, Ph.D. Thesis in Dept. of Electrical and Electronic Engineering University of Cagliari.
10. Michailidis, P. D. (2018). A Preliminary Performance Study on Nonlinear Regression Models using the Jaya Optimisation Algorithm. *International Journal of Applied Mathematics*, 48(4). **(indexed in Scopus)**.

11. Dorneles, N. A. (2018). Avaliação de algoritmos para determinação de regiões de confiança de parâmetros.
12. Jalal, L., Popescu, V., & Murroni, M. (2017). Quality-of-experience parameter estimation for multisensorial media using Particle Swarm Optimization. In Optimization of Electrical and Electronic Equipment (OPTIM) & 2017 Intl Aegean Conference on Electrical Machines and Power Electronics (ACEMP), 2017 International Conference on, 965-970. IEEE. **(indexed in IEEE)**.
13. Demirel, G., Acar, E., Celebioglu, K., & Aradag, S. (2017). CFD-driven surrogate-based multi-objective shape optimization of an elbow type draft tube. *International Journal of Hydrogen Energy*, 42(28), 17601-17610. **(indexed in SCI)**.
14. Jalal, L., & Murroni, M. (2017). A nonlinear quality of experience model for high dynamic spatio-temporal mulsemmedia. In Quality of Multimedia Experience (QoMEX), 2017 Ninth International Conference on, 1-6. **(indexed in IEEE)**.
15. Balku, Ş. (2017). Analysis of combined cycle efficiency by simulation and optimization. *Energy Conversion and Management*, 148, 174-183. **(indexed in SCI)**.

Cited work:

Örkcü, H. H., Özsoy, V.S., Aksoy, E., & Doğan, M. I. (2015). Estimating the parameters of 3-p Weibull distribution using particle swarm optimization: A comprehensive experimental comparison. *Applied Mathematics and Computation*, 268, 201-226. **(indexed in SCI)**.

Cited By

1. Zhou, D., Zhuang, X., & Zuo, H. (2021). A Novel Three-parameter Weibull Distribution Parameter Estimation Using Chaos Simulated Annealing Particle Swarm Optimization in Civil Aircraft Risk Assessment. *Arabian Journal for Science and Engineering*, 1-18. DOI: 10.1007/s13369-021-05467-0
2. Çankaya, M. N. (2021). On the estimating equations and objective functions for parameters of exponential power distribution: Application for disorder.
3. Yang, X. (2020). Application of PSO Method for Archimedean Copula Parameter Estimation in Flood (Rain) and Tide Joint Distribution Analysis. *Journal of Hydrologic Engineering*, 26(3), 05020052.
4. Krygin, A. (2020). Evaluation of The Weibull Distribution Parameters for Small Volume OF the sample in the Problems of Optimization of Planning Repair Works on Engineering Networks. *Management of Large Systems: Proceedings*, 84, 177-197. DOI: 10.25728/ubs.2020.84.9
5. Torres, M. K. V., Cruz, J. F. O., & Silupu, W. C. (2020). Optimization of the replacement time for critical repairable components. *DYNA*, 87(214), 93-99. DOI: 10.15446/dyna.v87n214.84509 (indexed in SCI-Expanded).
6. Çankaya, M. N. (2020). M-Estimations of Shape and Scale Parameters by Order Statistics in Least Informative Distributions on q-deformed logarithm. *Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 10(3), 1984-1996. DOI: 10.21597/jist.720712
7. Çankaya, M. N. (2020). On the Robust Estimations of Location and Scale Parameters for Least Informative Distributions. *Turkish Journal of Science and Technology*, 15(2), 71-78. <https://dergipark.org.tr/en/download/article-file/1095360>
8. Júnior, S. F. A. X., Xavier, É. F. M., da Silva Jale, J., de Oliveira, T. A., & Sabino, A. L. C. (2020). An application of Particle Swarm Optimization (PSO) algorithm with daily precipitation data in Campina Grande, Paraíba,

Brazil. Research, Society and Development, 9(8), e444985841-e444985841. DOI: 10.33448/rsd-v9i8.5841

9. Liu, Y., Wang, Y., Fan, Z., Chen, X., Zhang, C., & Tan, Y. (2020). A new universal multi-stress acceleration model and multi-parameter estimation method based on particle swarm optimization. *Proceedings of the Institution of Mechanical Engineers, Part O: Journal of Risk and Reliability*, 1748006X20918793. 10.1177/1748006X20918793 (indexed in SCI-Expanded).
10. Yonar, A., & Pehlivan, N. Y. (2020). Artificial Bee Colony with Levy Flights for Parameter Estimation of 3-p Weibull Distribution. *Iran J Sci Technol Trans Sci* . DOI: 10.1007/s40995-020-00886-4 (indexed in SCI-Expanded).
11. Liu, Q.B, Shi, W.K., Chen, Z.Y., Luo, L.M., Su, Z.Y., Huang, K.J. (2019) Parameter estimation of mixed reliability model based on kernel density optimal grouping and gravity search algorithm. *Journal of Jilin University (Engineering and Technology Edition)* 49 (6), 1818-1825.
12. Vanem, E., Gramstad, O., Bitner-Gregersen, E. M. (2019). A simulation study on the uncertainty of environmental contours due to sampling variability for different estimation methods. *Applied Ocean Research*, 91, 101870. **(indexed in SCI)**.
13. Zhang, J., Zhao, Y., Liu, M., Kong, L. (2019). A Tukey's g-and-h distribution based approach with PSO for degradation reliability modeling. *Engineering Computations*, DOI:10.1108/EC-11-2017-0428. **(indexed in SCI)**.
14. Lu, Z., Dong, L., & Zhou, J. (2019). Nonlinear Least Squares Estimation for Parameters of Mixed Weibull Distributions by Using Particle Swarm Optimization. *IEEE Access*, 7, 60545-60554. **(indexed in SCI)**.
15. Yang, F., Ren, H., & Hu, Z. (2019). Maximum Likelihood Estimation for Three-Parameter Weibull Distribution Using Evolutionary Strategy. *Mathematical Problems in Engineering*, 2019.
16. Acitas, S., Aladag, C. H., & Senoglu, B. (2019). A new approach for estimating the parameters of Weibull distribution via particle swarm optimization: An application to the strengths of glass fibre data. *Reliability Engineering & System Safety*, 183, 116-127. **(indexed in SCI)**.
17. Prasajo, A. P. S., & Prasetyoputra, P. (2019, June). PSO-KS Algorithm for Fitting Lognormal Distribution: Simulation and Empirical Implementation to Women's Age at First Marriage Data. In *IOP Conference Series: Materials Science and Engineering* (Vol. 546, No. 5, p. 052052). IOP Publishing.
18. Liu, Q., Shi, W., Chen, Z., Shang, G. (2018). Statistical distribution modeling and two-step parameter identification of vehicle bridge displacement spectrum. *Transactions of the Chinese Society of Agricultural Engineering*, 34 (23), pp. 67-75. DOI: 10.11975/j.issn.1002-6819.2018.23.008
19. Wu, Z., Zhang, S., & Wang, T. (2018). A cooperative particle swarm optimization with constriction factor based on simulated annealing. *Computing*, 100:861-880. **(indexed in SCI)**.
20. Yang, Y. (2017). A Clustering Method Based on PSO-GA Optimization Algorithm. *Revista de la Facultad de Ingeniería*, 32(10), 85-91.
21. Handoyo, S., Efendi, A., Jie, F., & Widodo, A. (2017). Implementation Of Particle Swarm Optimization (PSO) Algorithm For Estimating Parameter Of Arma Model Via Maximum Likelihood Method. *Far East Journal of Mathematical Sciences*, 102(7), 1337-1363. **(indexed in Scopus)**.
22. Okagbue, H. I., Adamu, M. O., Opanuga, A. A., Oghonyon, J. G. (2017). Classes of Ordinary Differential Equations Obtained for the Probability Functions of 3-Parameter Weibull Distribution. In *Proceedings of the World Congress on Engineering and Computer Science* (Vol. 2). **(indexed in WoS)**.

23. Mokhtari, H., & Salmasnia, A. (2017). Fitting the Three-parameter Weibull Distribution by using Greedy Randomized Adaptive Search Procedure. *International Journal of Engineering-Transactions C: Aspects*, 30(3), 424-431. **(indexed in ESCI)**.
24. Okagbue, H. I., Adamu, M. O., Opanuga, A. A., Oghonyon, J. G., & Adamu, P. I. (2017, October). 3-Parameter Weibull Distribution: Ordinary Differential Equations. In *The World Congress on Engineering and Computer Science*, 377-388. Springer.
25. Alavi, O., and Hooshmand Viki, A. (2017). A particle swarm optimization-based flowchart to select wind speed distribution function. *International Journal of Energy and Statistics*, 5(1), 1750003 **(indexed in ESCI)**.
26. Li, Y., Yu, W., Li, B., & Yao, R. (2016). A multidimensional model for green building assessment: A case study of a highest-rated project in Chongqing. *Energy and Buildings*, 125, 231-243. **(indexed in SCI)**.
27. Meng, W., Tonghai, J., Xiao, L., Yan, Z., Haiwei, W., (2016). Image Segmentation Based on Adaptive Inertia Weight Particle Swarm Optimization. *Rev. T c. Ing. Univ. Zulia*, 39(2), 235-241. **(indexed in Scopus)**.

Conference Proceedings

1.   zsoy, V.S., Bal, H. (2019, June 17-18). Two Stage Data Envelopment Analysis Models: Multiplicative and Additive Model. 10th *International Conference of Strategic Research on Scientific Studies and Education (ICoSReSSE)*, Rome, Italy.
2. Demir, E.,   zsoy, V.S.,   rkc  , H.H., (2019, June 28-30). Estimation of parameters of Levy Distribution by Genetic Algorithm: a simulation study. 3rd *International Congress of Applied Sciences*, Sivas, Turkey.
3. Bal, H.,   zsoy, V.S. (2019, June 17-18). Efficiency Analysis of Telecommunication Sector among The World's Top R&D investing companies. 10th *International Conference of Strategic Research on Scientific Studies and Education (ICoSReSSE)*, Rome, Italy.
4.   rkc  , H.H.,   zsoy, V.S.,   rkc  , M. (2019). Cross Efficiency Model in Network Data Envelopment Analysis Models. 6th *International Symposium on Academic Studies in Science, Engineering and Architecture Sciences*, Ankara, Turkey.
5.   rkc  , H.H.,   zsoy, V.S. (2019). Estimation of Parameters of Rayleigh Distribution by Differential Evolution Algorithm: A Simulation Study. 6th *International Symposium on Academic Studies in Science, Engineering and Architecture Sciences*, Ankara, Turkey.
6.   zsoy, V.S.,   rkc  , H.H., Bal, H., RTM: Interactive estimation tool for modeling real-time wind speed. 5th *International Conference on Management Information Systems (IMISC 2018)*, 2018, Ankara, Turkey.
7.   zsoy, V.S., Alp,   . R&D Index of Countries based on the R&D Performance of the World Top 2500 Companies. 1. *International Mersin Symposium*. Mersin.
8. G  lc  kc  , A.,   zsoy, V.S., Bal, H. Multiplier DEA Model in case of zero data for Cultural Development Comparison. 4th *International Congress on Social and Economic Sciences (ICES)*, November 26-30, 2018, Budapest, Hungary.
9. Alp,   .   zsoy, V.S., NBA 2016 Sezonu Basketbol Takımların Veri Zarflama Analizi ile Performansının Değerlendirilmesi. 1. *International Mersin Symposium*. Mersin, Turkey.

10. Bal, H., **Özsoy, V.S.**, Gölcükcü, A., Comparison of DEA Models for The Performance Evaluation of The World's Top R&D Investing Companies in The Automobiles Industry. *4th International Congress on Social and Economic Sciences (ICSES)*, November 26-30, 2018, Budapest, Hungary.
11. **Özsoy, V.S.**, Kocak, E., "Evaluation of the Life Index Based on Data Envelopment Analysis: Quality of Life Indexes of Turkey", *10th International Statistics Congress*, 2017, December 06 to 08, 2017 Ankara, Turkey.
12. Tüzüner, Z., Örkücü, H.H., Bal, H., **Özsoy, V.S.**, Kocak, E., "The Health Performances of the Turkey Cities by the Mixed Integer DEA Models", *10th International Statistics Congress*, 2017, December 06 to 08, 2017 Ankara, Turkey.
13. **Özsoy, V.S.**, Bal, H., "A New Variable Selection Method for Data Envelopment Analysis Through Bootstrap Approach", *International Conference on Computational and Statistical Methods in Applied Sciences (COSTAS 2017)*, November 9 to 11, 2017 Samsun, Turkey.
14. Bal, H., **Özsoy, V.S.**, Örkücü, H. H., "A New Weights Method for Cross Efficiency Based on Goal Programming in Data Envelopment Analysis", *International Conference on Computational and Statistical Methods in Applied Sciences (COSTAS 2017)*, November 9 to 11, 2017 Samsun, Turkey.
15. **Özsoy, V.S.**, Örkücü, H. H., Dogan, M. I., Bal, H., "Evaluation of Dynamic Performance of Electricity Distribution Companies in Turkey using Window Analysis", *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, 24-26 May, 2017, Konya, Turkey.
16. **Özsoy, V.S.**, Örkücü, H. H., Dogan, M. I., Bal, H., "Simulation study of estimating the unknown parameters in distributions using Particle Swarm Optimization", *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, 24-26 May, 2017, Konya, Turkey.
17. **Özsoy, V.S.**, Örkücü, H. H., Dogan, M. I., Bal, H., "Measuring the efficiency in the Turkish Banking Industry: Application of Data Envelopment Analysis and Malmquist Productivity Index", *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, 24-26 May, 2017, Konya, Turkey.
18. Dogan, M. I., Örkücü, H. H., **Özsoy, V.S.**, Bal, H., "A Hybrid Method for Multi-Group Classification Problem", *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, 24-26 May, 2017, Konya, Turkey.
19. Dogan, M. I., Örkücü, H. H., **Özsoy, V.S.**, Bal, H., "A New Two-Group Classification Method Based on Data Envelopment Analysis", *3rd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2017)*, 24-26 May, 2017, Konya, Turkey.
20. Bal, H., **Özsoy, V.S.**, "Selecting DEA model specifications and ranking units via Principal Component Analysis: A application of economic performance of cities", *International Conference on Economics, Business Management and Social Sciences (ICEBSS 2016)*, October 5-9, 2016, Sarajevo, Bosnia-Herzegovina.
21. Gölcükcü, A., **Özsoy, V.S.**, Bal, H., "Matrix Model for Multiple Group Comparison with Malmquist Data Envelopment Analysis: a Basketball League Example",

Operational Research Society Annual Conference (OR58), Page 21-29, 6 – 8 September 2016, University of Portsmouth, Portsmouth, Germany.

22. Örkücü, H.H., **Özsoy, V.S.**, "New approaches to cross efficiency in DEA and performance evaluation of Turkey's cities", *International Conference on Applied Mathematics and Analysis (ICAMA2016)*, Page 78, July 11-13, 2016, Atılım University, Ankara, Turkey.
23. **Özsoy, V.S.**, Örkücü, H.H., "Measuring the efficiency of Turkey airports with various data envelopment analysis models", *International Conference on Applied Mathematics and Analysis (ICAMA2016)*, Page 83, July 11-13, 2016, Atılım University, Ankara, Turkey.
24. **Özsoy, V.S.**, "Yapay Arı Kolonisi ile Doğrusal Olmayan Regresyon Modellerinin Parametre Tahmini", *Proceedings of 17th International Symposium on Econometrics, Operations Research and Statistics*, Page 674-675, June 2-4, 2016, Cumhuriyet University, Sivas, Turkey.
25. **Özsoy, V.S.**, Örkücü, H.H., "Benzetilmiş Tavlama Algoritması ile Üç Parametrelili Weibull Dağılımının Parametrelerinin Tahmin Edilmesi", *Proceedings of 17th International Symposium on Econometrics, Operations Research and Statistics*, Page 630-631, June 2-4, 2016, Cumhuriyet University, Sivas, Turkey.
26. **Özsoy, V.S.**, Bal, H., "Küresel Rekabetçilik Endeksinin Veri Zarflama Analizi ile Ölçülmesi ve Bootstrap Veri Zarflama Analizi Uygulaması", *Proceedings of 17th International Symposium on Econometrics, Operations Research and Statistics*, Page 640-641, June 2-4, 2016, Cumhuriyet University, Sivas, Turkey.
27. Örkücü, H.H., **Özsoy, V.S.**, "Estimating the unknown parameters of the four parameter Burr III distribution through Differential Evolution", *Proceedings of 2nd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2016)*, Page 38, May 4-8, 2016, Hacettepe University, Ankara, Turkey.
28. Bal, H., **Özsoy, V.S.**, Örkücü, H.H., "A goal programming method selection of weights in Data Envelopment Analysis: An evaluation of efficiency of Turkish airports case", *Proceedings of 2nd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2016)*, Page 36, May 4-8, 2016, Hacettepe University, Ankara, Turkey.
29. **Özsoy, V.S.**, Bal, H., Tüzüner, Z., "Evaluation of performance of the highways of the European Union countries using Bootstrap Data Envelopment Analysis", *Proceedings of 2nd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2016)*, Page 37, May 4-8, 2016, Hacettepe University, Ankara, Turkey.
30. Dogan, M.I., **Özsoy, V.S.**, Örkücü, H.H., "Assessing productive efficiency of banks using Malmquist DEA and Bootstrap DEA: A case of Turkish banks", *Proceedings of 2nd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2016)*, Page 35, May 4-8, 2016, Hacettepe University, Ankara, Turkey.
31. Tüzüner, Z., Bal, H., **Özsoy, V.S.**, "Performance Evaluation of European Union Countries Transportation with Stochastic Frontier Analysis", *Proceedings of 2nd International Researchers, Statisticians and Young Statisticians Congress (IRSYSC 2016)*, Page 90, May 4-8, 2016, Hacettepe University, Ankara, Turkey.

32. **Özsoy, V.S.**, Bal, H., "Measurement of Climate Risk Index with Data Envelopment Analysis", *Proceedings of the 35th Operations Research and Industrial Engineering Congress (ORIE 2015)* , 129-130, Sept 9-11, 2015 , METU, Ankara, Turkey.
33. **Özsoy, V.S.**, Alp, İ., "Turkish Decision Support System for Performance Analysis With C# Programming Language", *Proceedings of the 11th International Conference of Data Envelopment Analysis and Performance Measurement (DEA2013)*, 389-394, June 27-30, 2013 , Samsun, Turkey.
34. **Özsoy, V.S.**, Alp, İ., "New Decision Support System for Performance Analysis", *Proceedings of 10th International Conference on Knowledge, Economy and Management & 11th International Conference of ASIA Chapter of the AHRD & 2nd International Conference of MENA Chapter of Academy of Human Resource Development*, 494-501, Nov 8-10, 2012, İstanbul, Turkey.
35. **Özsoy, V.S.**, Alp İ., "New Decision Support System for Performance Analysis", *Proceedings of the 5th Engineering and Technology Symposium*, 114-117, Apr 26-27, 2012, Ankara, Turkey.

Reviews

- *Referee:* Expert Systems (SCI-Expanded)
- *Referee:* INFOR: Information Systems and Operational Research (indexed in SCI)
- *Referee:* Gazi University Journal of Science (indexed in ESCI)
- *Referee:* Gazi University Journal of Polytechnic (indexed in ESCI)
- *Referee:* The 4th International Conference on Fuzzy Systems and Data Mining, Bangkok, November 16-19, 2018.
- *Referee:* 3rd International Conference on New Energy and Future Energy System
- *Referee:* The 3rd International Conference on Fuzzy Systems and Data Mining, National Dong Hwa University in Taiwan during November 24-27, 2017.

Honors

- Incentive Awards for International Scientific Publications 2019
TUBİTAK Ankara, Turkey
- Incentive Awards for International Scientific Publications 2019
Gazi University, Ankara, Turkey
- Honorable Mention Award 2016
Int. Conf. on Business Economics and Soc. Sci., Sarajevo, Bosnia-Herzegovina
- Incentive Awards for International Scientific Publications 2016
Gazi University, Ankara, Turkey
- Graduated second among 60 students in the department 2010
Karadeniz Technical University, Trabzon, Turkey

Professional Society Service

- Member: International Association of Engineers (IAENG), since 2017
- Member: International Statistical Institute (ISI), since 2014
- Member: Bernoulli Society (BS), since 2013
- Member: European Network for Business and Industrial Statistics (ENBIS), since 2013