

Curriculum Vitae

Kaoru TONE

June 13, 2011

1 Current Affiliation and Address

Professor Emeritus Kaoru Tone

National Graduate Institute for Policy Studies

7-22-1 Roppongi, Minato-ku,

Tokyo 106-8677, Japan

e-mail:tone@grips.ac.jp

fax: +81-3-6439-6010

tel: +81-3-6439-6230

2 Academic Background

1. Graduated from the University of Tokyo, Department of Mathematics in 1953.
2. Ph.D. in Operations Research from Keio University in 1976.

3 Academic Career

1. Professor Emeritus at National Graduate Institute for Policy Studies:2008-present.
2. Academic Fellow at National Graduate Institute for Policy Studies: 2006-present.
3. Research Fellow at National Graduate Institute for Policy Studies: 2005-2006.
4. Professor at National Graduate Institute for Policy Studies: 1998-2005.
5. Professor Emeritus at Saitama University: 1998-present.
6. Professor at Saitama University, Graduate School of Policy Science: 1977-1998.
7. Associate Professor at Keio University, Faculty of Engineering: 1966-1977.
8. Associate Professor at Tokyo University of Agriculture and Engineering, Faculty of Engineering: 1963-1966.
9. Associate Professor at Tsuda-juku University, Faculty of Science: 1962-1963.

4 Academic Services

1. President of the Operations Research Society of Japan: 1996-1998.
2. Editorial Board of *Omega*.
3. Editorial Board of *The Journal of Data Envelopment Analysis* .
4. Editorial Board of *Socio-Economic Planning Sciences*.

5. Editorial Board of *Encyclopedia of OR/MS* (Kluwer Academic Publishers).
6. Editor-in-Chief, *Journal of the Operations Research Society of Japan:1976-1978*.
7. Editorial Board of *Metamorphosis*. Indian Institute of Management.
8. Editorial Board of *Journal of Optimization Theory and Applications*.

5 Main Publications

1. "Dynamic DEA: A Slacks-based Measure Approach, " K. Tone, M. Tsutsui, *Omega*, 38, 145-156, 2010..
2. "Variations on the theme of slacks-based measure of efficiency in DEA, " K. Tone, *European Journal of Operational Research*, 200, 901-907, 2010
3. "An epsilon-based measure of efficiency in DEA: A third pole of technical efficiency, " K. Tone, M. Tsutsui, *European Journal of Operational Research*, 207, 1554-1563, 2010.
4. "Network DEA: A Slacks-based Measure Approach, " K. Tone, M. Tsutsui, *European Journal of Operational Research*, 197, 243-252, 2009.
5. "Bridging Radial and Non-radial Measures of Efficiency in DEA," K. Tone, N.K. Avkiran, M. Tsutsui, *Annals of Operations Research*, 164, 127-138, 2008.
6. "A Multi-stage Method to Measure Efficiency and its Application to Japanese Banking Industry," K. Tone, J. Liu, *Socio-Economic Planning Sciences* 42, 75-91, 2008.
7. "Some Models and Measures for Evaluating Performances with DEA: Past Accomplishments and Future Prospects," W. W. Cooper, L.M. Seiford, K. Tone , J. Zhu, *Journal of Productivity Analysis* 28, 151-163, 2007.
8. "Decomposition of Cost Efficiency and its Application to Japanese-US Electric Utility Companies," K. Tone, M. Tsutsui, *Socio-Economic Planning Sciences* 41, 91-106, 2007.
9. *Data Envelopment Analysis: A Comprehensive Text with Models, Applications, References and DEA-Solver Software*, Second Edition, W.W. Cooper, L.M. Seiford, K. Tone, Springer-Verlag, 490 pages, 2006.
10. "Re-examining Scale Elasticity in DEA," K. Tone, B.K. Sahoo, *Annals of Operations Research*, 145, 69-87, 2006.
11. *Introduction to Data Envelopment Analysis and Its Uses: with DEASolver Software and References*, W.W. Cooper, L.M. Seiford, K. Tone, Springer-Verlag, 354 pages, 2005.
12. "Evaluating Cost Efficiency and Returns to Scale in the Life Insurance Corporation of India Using Data Envelopment Analysis," K. Tone, B.K. Sahoo, *Socio-Economic Planning Sciences* 39, 261-285, 2005.
13. "Degree of Scale Economies and Congestion: A Unified DEA Approach," K. Tone, B. K. Sahoo, *European Journal of Operational Research*, 158, 755-772, 2004.
14. "Malmquist Productivity Index," Chapter 8 of *Handbook on Data Envelopment Analysis*, Cooper,

- W.W., Seiford, L.M. and Zhu, J., (eds.) Kluwer Academic Publishers, 2004.
15. "A Comparative Site Evaluation Study for Relocating Japanese Government Agencies out of Tokyo," K. Tone, Y. Takamura, *Socio-Economic Planning Sciences*, 37, pp.85-102, 2003.
 16. "Scale, Indivisibilities and Production Function in Data Envelopment Analysis," K. Tone, B.K. Sahoo, *International Journal of Production Economics*, 84, pp.165-192, 2003.
 17. "A Slacks-based Measure of Super-efficiency in Data Envelopment Analysis," K. Tone, *European Journal of Operational Research*, 143, pp.32-41,2002.
 18. "A Strange Case of the Cost and Allocative Efficiencies in DEA," K. Tone, *Journal of the Operational Research Society*, 53, pp.1225-1231, 2002.
 19. "Sensitivity and Stability Analysis in DEA: Some Recent Developments," K. Tone, W.W. Cooper, S. Li, L.M. Seiford, R.M. Thrall, J. Zhu) *Journal of Productivity Analysis*, 15, pp.217-246, 2001.
 20. "On Returns to Scale under Weight Restrictions in DEA," K. Tone, *Journal of Productivity Analysis*, 16, pp.31-47, 2001.
 21. "A Slacks-based Measure of Efficiency in Data Envelopment Analysis," K. Tone, *European Journal of Operational Research*, 130, pp.498-509, 2001.
 22. *Data Envelopment Analysis: A Comprehensive Text with Models, Applications, References and DEA-Solver Software* (with W.W. Cooper and L.M. Seiford), Kluwer Academic Publishers, 1999.
 23. "A Search Model with Subjective Judgements: Auditing of Incorrect Declarations," K. Tone, S. Iwasaki, *Omega*, 26, pp.249-261, 1998.
 24. "Measures of Inefficiency in Data Envelopment Analysis and Stochastic Frontier Estimation," K. Tone, W.W. Cooper, *European Journal of Operational Research*, 99, pp.72-88, 1997.
 25. "Several Algorithms to Determine Multipliers in Use in Cone-Ratio Envelopment Approaches to Efficiency Evaluations in DEA," K. Tone, in *Computational Approaches to Economic Problems* edited by H. Amman, B. Rustem and A. Whinston, Kluwer Academic Publishers, pp.91-109, 1997.
 26. "A Simple Characterization of Returns to Scale in Data Envelopment Analysis," K. Tone, *Journal of the Operations Research Society of Japan*, 39, pp.604-613, 1996.
 27. "An ϵ -free DEA and a New Measure of Efficiency," K. Tone, *Journal of the Operations Research Society of Japan*, 36, pp.167-174, 1993.
 28. "An Active-Set Strategy in an Interior Point Method for Linear Programming," K. Tone, *Mathematical Programming*, 59, pp.345-360, 1993.
 29. "On DEA Models," K. Tone, *Communications of the Operations Research Society of Japan*, 38, pp.34-40, 1993.
 30. "Remarks on Potential versus Barrier Function Methods for Linear Programming," K. Tone, *Journal of the Operations Research Society of Japan*, 34, pp.391-403,1991.

31. "An Efficiency Analysis of Public vs. Private Bus Transportation Enterprises," K. Tone, *Operations Research '90*, edited by H.E. Bradley, Pergamon Press, pp.357-366, 1991.
32. "Site Selection for a Large Scale Integrated Circuit Factory," K. Tone, S. Yanagisawa, *The Analytic Hierarchy Process*, edited by B.L. Golden, E.A. Wasil and P.T. Harker, Springer-Verlag, 242-250, 1989.
33. "A Comparative Study on AHP and DEA," K. Tone, *Policy and Information*, 13, pp.57-63, 1989.
34. "A Cost Information System for R&D and Production Management Program as Applied to a Solar Cell Development Project," K. Tone, *Operational Research '84*, edited by J.P. Brans, North-Holland, pp.531-545, 1985.
35. "Revisions of Constraint Approximations in the Successive QP Method for Nonlinear Programming Problems," K. Tone, *Mathematical Programming*, 26, pp.144-152, 1983.

6 Main Research Interests

1. Efficiency Analysis of Public and Private Enterprises
2. Mathematical Foundation of Efficiency Analysis
3. Group Decision Making
4. Application of OR/MS Methods to Public Sector Problems