

MEHMET CANER-CV

DATE: February 5- 2024

Areas of Interest: Machine Learning Econometrics, High Dimensional Financial Analysis, Portfolio Formation, Game Theory-High Dimensional Econometrics Interaction, Empirical International Finance

Current Position: Thurman-Raytheon Distinguished Professor of Economics, Department of Economics, NCSU 85% appointment. Department of Agriculture and Resource Economics, 15% appointment-NCSU.

Awards:

Journal of Econometrics Fellow, 2012.

Multa Scripsit Award, Econometric Theory, 2005.

Owens Scholar, NCSU, 2012-2013.

Research Award, Department of Economics, NCSU, 2009.

Gill Grant, NC State University, July 2008.

Outstanding Faculty, University of Pittsburgh, 2006.

First in the Graduates in College of Economic Sciences, METU, 1988.

Education: Ph.D., Economics, Brown University, 1996.

A.M., Economics, Brown University, 1993.

B.S., Business Administration, METU, Turkey, 1988.

Organized Conferences: 1. Centenary of Turkish Republic, Time Series Conference, 3 November 2023, Istanbul. Turkey.

2. Scientific Co-Chair: IAEE, Kings College London, July 2020. cancelled.

3. Scientific Chair- EC2- BIG DATA-APPLICATIONS-ROME DECEMBER 13-14 2018

4. November 12, 2011, Information Theory and Shrinkage Estimators, jointly organized with Amos Golan, Peter C.B. Phillips

Citation Count: Indexes Scholar Google as of February 5 2024: 4168, h index: 22, i-10:34

PUBLISHED ARTICLES (All Refereed)

1. “Weak Convergence to a Matrix Stochastic Integral with Stable Processes,” **Econometric Theory**, (1997), 13, 506-29.
2. “A Locally Optimal Seasonal Unit Root Test,” **Journal of Business and Economic Statistics**, (1998), 16, 349-356.
3. “Tests for Cointegration with Infinite Variance Errors,” **Journal of Econometrics**, (1998), 86, 155-175.
4. “Threshold Autoregressions with a Unit Root,” (with Bruce E. Hansen), **Econometrica**, (2001), 69, 1555-1597.
5. “Size Distortions of Tests of the Null Hypothesis of Stationarity: Evidence and Implications for the PPP debate,” (with Lutz Kilian), **Journal of International Money and Finance**, (2001), 20, 639-657.
6. “A note on LAD Estimation of a Threshold Model,” **Econometric Theory**, (2002), 18, 800-814.
7. “Time-Varying Betas Help in Asset Pricing: Threshold CAPM,” (with L. Akdeniz and A. Salih, Bilkent University). January (2003). **Studies in Nonlinear Dynamics and Econometrics**.
8. “Instrumental Variable Estimation of a Threshold Model,” (with Bruce Hansen, University of Wisconsin-Madison). **Econometric Theory**, (2004), 20, 813-843.
9. “Are Real Exchange Rates non-stationary or non-linear? Evidence from a new Threshold Unit Root Test,” (with E.Basci, Bilkent University). **Studies in Nonlinear Dynamics and Econometrics**, (2005), vol.9.4.
10. Corrigendum with E. Basci and G. Yoon “Are Real Exchange Rates non-stationary or non-linear? Evidence from a new Threshold Unit Root Test” **Studies in Nonlinear Dynamics and Econometrics**, (2006).
11. “M Estimators with Non-Standard Rates of Convergence with Weakly Dependent Data,” **Journal of Statistical Planning and Inference**, (2006), 136, 1207-12.

12. “Boundedly Pivotal Structural Change Tests in Continuous Updating GMM with Strong, Weak Identification and Completely Unidentified Cases,” (2007), **Journal of Econometrics**, 137, 28-67.
13. “Are the nearly exogenous Instruments reliable?” Joint With D. Berkowitz, Y. Fang, **Economics Letters**, (2008), 101, 20-23.
14. “Nearly Singular Design in GMM and Generalized Empirical Likelihood Estimators,” **Journal of Econometrics**, (2008), 144, 511-524.
15. “Lasso Type GMM Estimator” **Econometric Theory**, (2009), 25, 270-290.
16. “The Norwegian Sovereign Wealth Fund” (joint with Tom Grennes), **Revue d’Economie Financiere**. (Invited)(Special Issue for 2009)
17. “Testing, Estimation in GMM and CUE With Nearly-Weak Identification?. **Econometric Reviews**, (2010), 29, 330-363.
18. “Analysis of Norwegian Sovereign Wealth Fund” with Tom Grennes, **The World Economy**, (2010), 33, 597-613. (Top Ten Downloaded papers in SSRN, Nov-Dec-2008, Jan 2009).
19. “Exponential Tilting With Weak Instruments: Estimation and Testing?, **Oxford Bulletin of Economics and Statistics**, (2010), 72, 307-326.
20. Book Chapter: “Finding The Tipping Point-When Sovereign Debt Turns Bad” **Conference Volume World Bank Conference on Debt Management**,(refereed), (2010)(joint with Tom Grennes,NCSU, Fritzi Koehler-Geib, World Bank).
21. “Determinants of Investment by Norwegian Sovereign Wealth Fund” joint with Turanay Caner, Tom Grennes, (2011),**Global Economy** Berkeley Electronic Press.
22. “A Pretest to differentiate between weak and nearly-weak instrument asymptotics”, **International Econometric Review**, (2011).
23. “Pivotal Structural Change Tests in Linear Systems with Weak Identification” **Econometric Theory** , (2011), 27(2), 413-426.
24. “The Validity of Instruments Revisited” with D. Berkowitz, Y.Fang , **Journal Of Econometrics**, (2012),166, 255-267.

25. “Editorial: 30 years of GMM” with M. Carrasco (main editor), Yuichi Kitamura, Eric Renault, **Journal of Econometrics**, (2012), 170, 251-255.
26. “CUE with Many Weak Instruments and Nearly Singular Design” with N. Yildiz, **Journal of Econometrics**, 170, 422-441.
27. “An Alternative to Unit Root Tests: Bridge Estimators Differentiate between Nonstationary versus Stationary Models and Select Optimal Lag” **Journal of Statistical Planning and Inference**, Joint with Keith Knight, (2013) 143, 691-715, .
28. “Valid Tests When Instrumental Variables Do Not Perfectly Satisfy the Exclusion Restriction” (with J.A. Riquelme, D. Berkowitz), (2013), **Stata Journal**.
29. “Adaptive Elastic Net GMM Estimator with Diverging Number of Parameters”, Joint With Helen Zhang, Department of Statistics.NCSU, **Journal of Business and Economics Statistics**.(2014) 32, 30-47, .
30. “Selecting the Correct Number of Factors in Approximate Factor Models: The Large Panel Case with Group Bridge Estimator” **Journal of Business and Economics Statistics**. (with Xu Han, City University of Hong Kong), (2014),32, issue 3, p.359-374.
31. “Near Exogeneity and Weak Identification in Generalized Empirical Likelihood Estimators: Many Moment Asymptotics” **Journal of Econometrics**, (2014), 182 issue 2, p.247-268.
32. “Hybrid GEL Estimators: Instrument Selection with Adaptive Lasso”with Michael Fan, Xiamen University, WISE, **Journal of Econometrics**, (2015), 187, 256-274.
33. “Oracle Inequalities in Convex Models” with A. Bredahl Kock. **Econometric Reviews**, (2016), 35, 1377-1411.
34. “Comparison of several moment selection methods: A simulation study” with Essie Maasoumi, J.A. Riquelme. **Econometric Reviews**, (2016), 35, 1562-1581.
35. “Sharp Threshold Detection Based on Sup-norm Error Rates in High Dimensional Models” with L. Callot, (Free Univ. Amsterdam), A.B. Kock (Arhus Uni), and J.A. Riquelme, **Journal of Business and Economics Statistics**, (2017), 35, 25-264.

36. “Determining the number of factors with potentially strong block correlation error terms? **Econometric Reviews**, (2017) (main author: Xu Han, Caner Contribution is very very minor), 36, 947-969.
37. “Adaptive Elastic Net GMM with many invalid moment conditions: Simultaneous model and moment selection” with Xu Han and Yoonseok Lee. **Journal of Business and Economics Statistics**, (2018), 36, 24-46.
38. “Asymptotically Honest Confidence Regions for High Dimensional Parameters by the Desparsified Conservative Lasso” with A. B. Kock, **Journal of Econometrics**, (2018), 203,143-168.
39. “Inference in partially identified models with many moment inequalities using lasso? (F. Bugni, A. B. Kock. S. Lahiri) **J. of Statistical Planning and Inference**, (2020),206, p.211-248.
40. “A starting note: A historical perspective in lasso” **International Econometric Review**, (2021), 13, 1-3.
41. “Partners in debt: An endogenous non-linear analysis of the effects of public and private debt on growth”(with Q.Fan-Chinese Univ of Hong Kong, T. Grennes), **International Review of Economics and Finance**, (2021), 76, 694-711.
42. “An upper bound for functions of estimators in high dimensions” with Xu Han. **Econometric Reviews**, (2021), 40, 1-13. Lead Article.
43. “ A nodewise regression approach to estimating large portfolios” with L. Callot, O. Onder, E. Ulasan, **J. of Business and Economics Statistics**, (2021), 39(2),520-531.
44. “Sharpe Ratio Analysis in High Dimensions: Residual-Based Nodewise Regression in Factor Models” with M. Medeiros(PUC-Rio), G. Vasconcelos(BOCOM BBM Bank,Rio), **Journal of Econometrics**, (2023), 235, 392-413.
45. “Generalized Linear Models with Structured Sparsity Estimators” **Journal of Econometrics**,(2023), 236, 105478. Solo authored article.
46. ‘Should Humans Lie to Machines? The Incentive Compatibility of Lasso and General Weighted Lasso”, with Kfir Eliaz, Tel Aviv. Forthcoming, 2024, **J. of Business and Economic Statistics**.

Submitted Papers (Under Review)

“Deep learning in non-linear factor models”, with Maurizio Daniele-ETH.

Work in Progress

“Deep learning Sharpe ratio,” with Maurizio Daniele-ETH.

“Constrained high dimensional portfolio formation” with M. Fan-CUHK, Y. Li-HKUST

”Ridge-less large portfolio formation”.

Discussion of Articles in Popular Press:

1. Debt and Growth: Threshold effects: September 20, 2010: The Economist Blog: www.economist.com/blogs/freeexchange/2010/09/
2. Special Report on the World Economy: p.10. The Economist Print Edition: October 9-16, 2010: <http://www5.economist.com/node/17173878>
3. July 31, 2009. Triangle Business Journal: Discussion on Unit Roots versus Bridge Estimators. <http://triangle.bizjournals.com/triangle/stories/2009/08/03/story11.html>
4. Newspaper Article: with Tom Grennes “When The Debt Piles Up”, March 7, 2011. Raleigh News and Observer.
- 5.Excessive debt takes a toll on growth, online editorial Chicago Tribune. May 2019, with Tom Grennes
- 6.Blame outsized debt. Online editorial, The Hill, May 2019, with Tom Grennes, Qingliang Fan.
7. Aug 11-2022. researchtriangle.org “Artificial intelligence program effectively manages asset portfolios”
8. Aug 21-2022: bizjournals.com “How NC State research focuses on maximizing stock portfolio returns”

Service to Econometrics

Co-Founder and Organizer of Machine Learning in Finance-online seminars.2024.

Invited Professional Talk:

Machine Learning and Finance-Turkish Capital Union Board, march 8 2023.

Practice of Machine Learning

Co-Founder of Magnus-AI with a former post-doc, Turkiye, Running three mutual funds in Istanbul Stock Exchange by machine learning that we developed from our own research.

Keynote Speaker:

12-International Econometric Conference, Denizli, Turkey, Key Note Speaker, May 2011.
14-International Econometric Conference, Sarajevo, Bosnia, Key Note Speaker, May 2013.

Invited Talks at Conferences:

Panel Discussion on big Data, Indiana University, September 2023.
High Dimensional Factor Models-University of Rochester, April 27-28, 2023.
CES-CFE, London, UK, December 2021, virtual.
Econometric Research Institute, Ankara-Turkey-Virtual, January 2021.
Large Dimensions in Econometrics, Montreal, May 2017.
Canadian Econometric Society, Plenary Session, October 2016.
Hi Dimensional Econometrics, June 2015, University of Cambridge, UK.
Macro-Econometrics Conference May 2015, Department of Economics, University of York, UK.
High Dimension Reduction, University of Montreal, May 2012.
Macroeconomic and Financial Imbalances in National Economies and the World , Bosphorus University, Istanbul Turkey, 19-20 December 2011 .
“Econometric Aspects of Transmission Analysis” University of Goettingen, Germany August 12-14, 2010
Nonlinear Time Series Conference, Xiamen University, China, May 2008.

Presentations-Departments: (Last 8 years)

May 2024: Univ. of California-San Diego, Economics Department.
December 2023: Univ. of Maryland.
September 2023: Univ. of Miami.
September 2023: Emory University.
September 2023: Mc Gill University (Joint with Montreal)
April 2023: Univ. of Illinois-Urbana-Champaign,
Spring 2021: Chinese University of Hong Kong-Virtual.
Fall 2020: Simon Fraser-Virtual
Fall 2019: Vanderbilt University.
Fall 2018: University of Illinois-Urbana
Fall 2018: Rutgers University
Fall 2018: University of Virginia
Fall 2018: University of Washington.

November 2017, Emory University.
October 2017, University of Southern California.
October 2017, University of California-Irvine.
October 2017, University of California-Riverside.
April 2017, Southern Methodist University.
March 2017, NYU Stern Statistics.
November 2016, Montreal, McGill, Concordia Joint Econometrics
September 2016, Yale University, Department of Economics
November 2015, University of Maryland, Economics

Conference Presentations: (Last 8 years)

Financial Econometrics conference, Koc University, Istanbul, November 2023.
Econometric Society-UCLA-Summer 2023.
Factor Models Conference-Univ of Rochester, May 2023.
EC-2 FACTOR MODELS: DECEMBER 2022.
NBER-NSF Time Series, september 2022, virtual.
African Econometric Society, July 2022.virtual.
World Congress Econometric Society, Milan,Italy-Virtual, August 2020.
Machine learning portal-webinar: Dalhousie-St Mary's halifax Canada. August 2020
SOFIE-LUGANO 2018
Econometric Society, Summer meetings, Washington-St Louis, June 2017.
Society of Financial Econometrics, NYU-STERN, JUNE 2017
Midwest Econometrics Group, October 2016
ESEM, GENEVA, 2016 AUGUST.

Refereeing

National Science Foundation, Econometrica, Review of Economic Studies, Journal of the American Statistical Association, Journal of Econometrics, Econometric Theory, International Economic Review , Journal of Business and Economic Statistics, Journal of Multivariate Analysis, Econometric Reviews, Journal of Applied Econometrics, Econometrics Journal, Journal of Economic Growth, Economics Letters, Journal of Statistical Planning and Inference, Social Sciences Council (Canada), Review of Economics Statistics.

Teaching: Econometrics Undergrad- Graduate, Statistics Graduate. Econometrics, Big Data Theory, PhD, Econometrics Big Data-Finance Applications, PhD.

Ph. D Students AdvisedFirst placements

1. Ying Fang, (Main Advisor). Xiamen University, China, Department of Economics, Assistant Professor, 2006.
2. Martin Burda (Main Advisor). University of Toronto, Canada, Department of Economics, Assistant Professor, 2007.
3. Gunce Eryuruk (Main Advisor), 2009, Assistant Professor, ITAM, Mexico, Department of Economics.
4. Michael Fan, (Main Advisor), 2012, Assistant Professor, Xiamen University.
5. Juan Andres Riquelme, 2016, University Of Talca, Chile (Fullbright Scholar)
6. Yubo Hua,(Main Advisor) post-doc at Chinese University of Hong Kong, 2023.
7. Hongqiang Yan (Main advisor), post-doc at Arizona State University. Carey School of Business.

Service: College level tenure committee, 2010-2011. University scholar choice committee, 2013. Graduate Admissions Committee, 2013. New Chair Selection Committee-OSU 2016 Graduate Student Selection-OSU-2015-2016 Post Tenure review Chair 2023, april Graduate Admissions Committee, April 2023 Distinguished Professor Selection Committee-ARE, 2023.

References:

1. Bruce Hansen Trygve Haavelmo Professor Department of Economics University of Wisconsin-Madison 1180 Observatory Drive Madison, Wisconsin, 53706-1393. Phone:608-263-3880 Fax: 608-263-3876 Office: 6438 William H. Sewell Social Science Building behansen@wisc.edu
2. Marcelo Medeiros Jorge Paulo Lemann Professor of Economics Department of Economics University of Illinois at Urbana-Champaign 126 David Kinley Hall 1407 West Gregory Drive Urbana, IL 61801 marcelom@illinois.edu
3. Anders B Kock Professor of Economics Department of Economics University of Oxford St.Hilda's College, UK anders.kock@economics.ox.ac.uk

Consulting:

The World Bank: January-July 2009. June 2011-July 2011.

Previous Positions: Last 8 years

Professor of Economics (with tenure): Ohio State University, Aug 1 2015-August 15 2019
Translational Data Analytics Center-Ohio State University

Courtesy Appointment (with tenure): Professor of Statistics, Department of Statistics,
Ohio State University

Visiting Professor of Economics(By Invitation by Columbia University Economics): Columbia
University-NY, Teaching Masters Econometrics Fall 2018

January-June 2015 (Visiting Profesor) Department of Economics, MIT.