

Editorial

## **Econometrics Best Paper Award 2018**

**In Choi**<sup>1</sup>, **Steve Cook**<sup>2</sup>, **Marc S. Paolella**<sup>3,\*</sup> and **Jeffrey S. Racine**<sup>4</sup>

<sup>1</sup> Deputy Editor-in-Chief, Department of Economics, Sogang University, 35 Baekbeom-ro, Mapo-gu Seoul, 121-742 Korea; inchoi@gmail.com

<sup>2</sup> Deputy Editor-in-Chief, Department of Economics, Swansea University, SA2 8PP, Wales, UK; s.cook@swansea.ac.uk

<sup>3</sup> Editor-in-Chief, Department of Banking and Finance, University of Zurich, 8032 Zürich, Switzerland

<sup>4</sup> Deputy Editor-in-Chief, Department of Economics, McMaster University, 1280 Main Street West, Hamilton, Ontario, L8S 4M4, Canada; racinej@mcmaster.ca

\* Correspondence: marc.paolella@bf.uzh.ch

Received: 15 August 2018; Accepted: 17 August 2018; Published: 19 August 2018



Since 2016, the journal *Econometrics* has instituted the Best Paper Award to recognize the most outstanding papers that have been published in its journal (cf. [Patterson 2016](#)). We continue with our practice of recognizing outstanding scientific publications in our journal over the last two years.

The best paper was judged by a distinguished panel of econometricians forming the Econometrics Award Advisory Board (EAAB), the members of which are listed below. They consist of members of the Editorial Board of *Econometrics*, and econometricians renowned for the extent and quality of their contributions and international experience. Nominations were selected from all papers published in 2016 and 2017. Following extensive review by the EAAB, we are pleased to announce that the following two papers, in no particular order, have been awarded the “*Econometrics Best Paper Award*” for 2018:

**Bruno Rémillard** for his article entitled “Goodness-of-Fit Tests for Copulas of Multivariate Time Series” (cf. [Rémillard 2017](#)). Available online at: <http://www.mdpi.com/2225-1146/5/1/13>.

Sequential empirical processes are often used for testing structural change. A problem which arises is that these often involve unknown stochastic innovations. Replacing these with estimated residuals raises the question of what effect that has upon the sequential empirical process. This paper shows that when the innovations come from multivariate stochastic volatility models then the fact that the conditional means and variances of the innovations are estimated rather than known does not matter asymptotically. Under a common restriction on the correlations of the stochastic volatilities the results extend to empirical copula processes and hence allow goodness of fit tests for them. This is a rich paper and its results have been used in a variety of extensively cited applied works. It is an outstanding example of a paper that is rigorous and innovative, and it is highly relevant to modelling data that features stochastic volatility and copula-based methods of allowing for general multivariate densities.

**Seong Yeon Chang and Pierre Perron** for their article entitled “Fractional Unit Root Tests Allowing for a Structural Change in Trend under Both the Null and Alternative Hypotheses” (cf. [Chang and Perron 2017](#)). Available online at: <http://www.mdpi.com/2225-1146/5/1/5>.

This paper considers testing procedures for the null hypothesis of a unit root process against the alternative of a fractional process. By extending the Lagrange Multiplier tests of [Robinson \(1994\)](#) and [Tanaka \(1999\)](#), the proposed test allows a structural change in a trend function under both the null and alternative hypotheses. This extension created several merits. It allows a structural break in trend under both the null and alternative hypotheses. Structural change occurs in many time series. Possible sources of structural change may include financial crises and changes of fiscal and monetary policies. This work can be applied to a wide range of empirical studies. A nice feature of the developed test is that it does not require long memory to be distinguished from structural change. Thanks to this

new test, the power can be substantially improved when a break is actually present. In summary, the proposed test offers useful complements to existing tests and surely creates new economic insights in various empirical studies.

These two outstanding papers are valuable contributions to *Econometrics*. On behalf of the Econometrics Award Advisory Board and the Editorial Board, we would like to congratulate the authors for their excellent work. In recognition of their accomplishment, they will each receive the prize of 500 CHF. We also would like to thank the members of the Econometrics Award Advisory Board for their invaluable support and contributions to the process of evaluating the shortlisted articles.

*Econometrics Award Advisory Board:*

**Tomoriho Ando**, Melbourne Business School, University of Melbourne, Australia

**Giuseppe Cavaliere**, Department of Economics, University of Bologna, Italy

**David E. Giles**, Department of Economics, University of Victoria, Canada

**Carlos Lamarche**, Department of Economics, University of Kentucky, US

**Adrian Pagan**, School of Economics, University of Sydney, Australia

## References

- Chang, Seong Yeon, and Pierre Perron. 2017. Fractional Unit Root Tests Allowing for a Structural Change in Trend under Both the Null and Alternative Hypotheses. *Econometrics* 5: 5. [[CrossRef](#)]
- Patterson, Kerry. 2016. Econometrics Best Paper Award 2016. *Econometrics* 4: 33. [[CrossRef](#)]
- Rémillard, Bruno. 2017. Goodness-of-Fit Tests for Copulas of Multivariate Time Series. *Econometrics* 5: 13. [[CrossRef](#)]
- Robinson, P. M. 1994. Efficient tests of nonstationary hypothesis. *Journal of the American Statistical Association* 89: 1420–37. [[CrossRef](#)]
- Tanaka, Katsuto. 1999. The nonstationary fractional unit root. *Econometric Theory* 15: 549–82. [[CrossRef](#)]



© 2018 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).