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UNIVERSITY OF GRONINGEN

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Personal

Date of Birth: 16 February 1977
Sex: Male
Citizenship: Italian

Education

Laurea, Political Science and Economics, Università di Cagliari (Italy), *Summa cum Laude*, 2003
MSc Economics, University of Warwick (UK), 2005

Graduate Studies

PhD Economics, University of York (UK), 2009
Thesis Title: “*Essays on Generalized Empirical Likelihood and Time Series*”
Thesis committee: Dr. Patrick Marsh, Dr. Jan Podivinsky

Appointments

Post Doc Researcher at the University of Groningen, 2009 to present

Teaching and Research Interests

Econometrics, Time Series

Teaching Experience

Teaching Assistant at the University of York for Dr. F. Bravo, *Econometrics for Economists*, 2006
Teaching Assistant at the University of York for Dr. J. Swaffield, *Econometrics for Economists*, 2005
Teaching Assistant at the University of Cagliari for Prof. S. Lodde, *Economics 1*, Spring 2003.

Work Experience

Member of the Local Development Office at the Province of Cagliari, *Summer/Fall 2003*
Research Assistant at CRENoS for the Project EDA (Employability, Development and Adaptability)
founded by the European Social Found, *Spring/Fall 2003*.

Languages

Italian native, Sardinian native, English fluent, German basic.

Memberships

Econometric Society (2005 to present), Royal Economic Society (2006 to present), Institute of Mathematical Statistics (2007 to present).

Computer Skills

Programming: R (TinnR, RKward),

Computing: Eviews, PcGive, Scientific Workplace, Ubuntu (Hardy Heron), Open Office Package, Windows (XP, Vista), Office Package.

Honors and Awards

Regione Sardegna Master&Back Scholarship (2006-2008)

University of York Teaching Fellowship (2005-2006)

University of Cagliari Teaching Fellowship (2003)

Presentations

Title: Efficient Bootstrap with Weakly Dependent Processes

Conference: 3rd International Conference on Computational and Financial Econometrics

Limassol, Cyprus, 29-31 October 2009

Title: GMM, Generalized Empirical Likelihood, and Time Series

Conference: 4th PhD Presentation Meeting at UCL

London, UK, 17-18 January 2009

Title: GMM, Generalized Empirical Likelihood, and Time Series

Conference: 33rd Simposio de Analisis Economico

Zaragoza, Spain, 11-13 December 2008

Current Research

GMM, Generalized Empirical Likelihood, and Time Series

Abstract: Since Hansen's (1982) seminal paper GMM estimation has become a standard tool among applied economists in a wide variety of fields. The GMM framework may be easily used both for estimation and testing. A major drawback is that GMM inference relies exclusively on asymptotic approximations. A considerable body of Monte Carlo evidence has pointed out that GMM inference, and particularly the J-test, is affected by large bias in the presence of small and moderate sample sizes, leading to rejection rates that are higher than the asymptotic rates. In what follows we generalize the results of Kitamura (1997) for BEL to the more general class of Blockwise (B)GEL estimators. The resulting BGEL estimator is proved to be consistent and asymptotically normal and attains the semiparametric lower bound. In addition, we define the BGEL version of the classical trinity of tests, Wald, Lagrange Multiplier, and Likelihood Ratio tests. We find via Monte Carlo experiments that the overidentification tests that stem from the BGEL estimator have generally better small sample properties than the J-test.

Efficient Bootstrap with Weakly Dependent Processes (with F. Bravo)

Abstract: This paper develops Brown and Newey (2002) efficient bootstrap methodology for moment condition models with weakly dependent observations. The resulting bootstrap procedure is shown to be asymptotically valid and its finite sample performance is assessed using simulations.

Z-Estimators and Auxiliary Information

Abstract: In this paper we analyze the asymptotic behaviour of a Z-estimator with auxiliary information when the data show a time series pattern. The auxiliary information is exploited to construct Generalized Empirical Likelihood (GEL) probabilities that will enter the sample analogue of our initial model. Auxiliary information can be useful to improve the efficiency of the basic Z-estimator and reduce its bias. We assume that extra information is available in the form of a moment function and that does not depend on unknown parameters (see for example Hellerstein and Imbens, 1999). What we propose is an extension to the time series case of the work of Bravo (2008), and it is to some extent an alternative to the approach of Smith (2005). Our procedure consists of estimating a set of probabilities via GEL from the moments that contain the extra information. With respect to the work of Smith (2005) the asymptotic results are the same, but computation is much simpler, as we do not need to nest the extra information within the GEL algorithm.

References

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