Accepted Manuscript

Inference in continuous systems with mildly explosive regressors

Ye Chen, Peter C.B. Phillips, Jun Yu

PII: S0304-4076(17)30168-9
DOI: http://dx.doi.org/10.1016/j.jeconom.2017.08.016
Reference: ECONOM 4422

To appear in: *Journal of Econometrics*

Please cite this article as: Chen Y., Phillips P.C.B., Yu J., Inference in continuous systems with mildly explosive regressors. *Journal of Econometrics* (2017), http://dx.doi.org/10.1016/j.jeconom.2017.08.016

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Inference in Continuous Systems with Mildly Explosive Regressors*

Ye Chen[†] , Peter C. B. Phillips[††], and Jun Yu[†††]
[†]Capital University of Economics and Business
[††]Yale University, University of Auckland,
Singapore Management University & University of Southampton
[†††]Singapore Management University

August 20, 2017

Abstract

New limit theory is developed for co-moving systems with explosive processes, connecting continuous and discrete time formulations. The theory uses double asymptotics with infill (as the sampling interval tends to zero) and large time span asymptotics. The limit theory explicitly involves initial conditions, allows for drift in the system, is provided for single and multiple explosive regressors, and is feasible to implement in practice. Simulations show that double asymptotics deliver a good approximation to the finite sample distribution, with both finite sample and asymptotic distributions showing sensitivity to initial conditions. The methods are implemented in the US real estate market for an empirical application, illustrating the usefulness of double asymptotics in practical work.

Keywords: Cointegrated System; Explosive Process; Moderate Deviations from Unity; Double Asymptotics; Real Estate Market.

JEL classification: C12, C13, C58

*Phillips acknowledges support from the NSF under Grant No. SES 12-58258. Yu acknowledges financial support by the Singapore Ministry of Education (MOE) Academic Research Fund Tier 3 grant MOE2013-T3-1-009. We thank two referees, the editors, and seminar participants at Peking University for helpful comments on earlier versions of the paper.

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
✓ امکان دانلود نسخه ترجمه شده مقالات
✓ پذیرش سفارش ترجمه تخصصی
✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
✓ دانلود فوری مقاله پس از پرداخت آنلاین
✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات