## SPECIAL ISSUE OF ECONOMETRIC THEORY ON SETA 2010: EDITORS' INTRODUCTION

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## 1. BACKGROUND

One of the original goals of the journal *Econometric Theory* was to provide a leading research outlet for innovative theoretical developments in econometrics. With strong support of the econometrics community, that objective was soon realized. In the 30 years that have elapsed since the establishment of ET, there have been many changes in the world of econometrics. Over the last decade, growth in computer capability, software sophistication, and the availability of electronic data have changed the conduct of econometric work. Econometrics as a discipline has evolved in a way that brings theory and practice much closer together, a natural progression that has broadened the scope of the Journal and its content. ET's widened coverage of econometric theory and practice encourages theoretical papers with empirical illustrations, numerical simulations, and matters of practical implementation. These enhancements help to provide readers with a template for practical work with the methodological innovations that are introduced in the journal, making good econometric theory the handmaiden to good econometric practice.

These emergent themes of ET marry well with those of the recently formed Symposium of Econometric Theory and Applications (SETA). Over the short period of its existence, this conference series has become a widely welcomed and well attended econometric activity for participants throughout the Asia-Pacific region. SETA has been particularly influential in attracting leading econometricians from within the region, from North America, and from Europe as keynote speakers. The conferences are unashamedly econometric and highly collegial, with much interaction among the participants. The conference dinners are already legendary in their venues, cuisine, speeches, and award presentations.

The 2010 meeting of SETA was held in Singapore over April 30–May 2, hosted by Singapore Management University (SMU), and organized by the Centre for

Financial Econometrics (CoFie) in the Sim Kee Boon Institute for Financial Economics (SKBI) at SMU. The program included 3 keynote speakers, 7 invited speakers, and 39 contributed speakers. We served as the joint program co-chairs. This special issue of ET, entitled "Econometric Theory and Applications," collects research papers based on some of the invited talks at SETA 2010.

## 2. CONTENTS

The papers included in this issue of ET cover a variety of topics in econometric theory, financial econometrics, time series, panel data modeling, microeconometrics, and instrumental variable methods. The papers by Andersen, Dobrev, and Schaumburge and by Hansen and Lunde both contribute to the realized volatility literature, which is now a prominent feature of financial econometric practice. Andersen et al. study the robust estimation of integrated quarticity based on high frequency data, an important element in statistical inference about volatility. Hansen and Lunde provide an instrumental variable technique for estimating persistence and autocorrelation in integrated volatility. Xiao contributes to the risk management literature by introducing a new quantile measure of heavy tailedness for the right-tail distribution and a robust estimation method to estimate this measure. Bandi and Corradi propose a novel functional approach to nonstationarity testing in time series; the new tests are robust to nonlinear dynamics and work through rate conditions associated with the occupation time of the process. Komunjer and Ng develop limited information identification for parameters in dynamic models with measurement errors and explore the implications for both time series and dynamic panels. Cattaneo, Crump, and Jansson study density weighted average derivative estimation and develop robust asymptotic standard errors for these estimates that do not require the use of higher-order kernels, opening up new possibilities for applied research on the nonparametric estimation of marginal effects. Han, Phillips, and Sul contribute to the panel literature with a new methodology for estimating dynamic panel models with fixed effects and AR(p) errors; the method is easy to implement, and the resulting estimator is free from bias for all parameter values including unit root cases, making it attractive for empirical work. Abadir, Distaso, Giraitis, and Koul provide elegant new limit theory for triangular weighted sums of linear processes; the asymptotics hold under minimal conditions and apply to GARCH and ARCH( $\infty$ ) models as well as nonparametric kernel regression.

The new econometric methods presented in this special issue are of theoretical interest and practical import for applied work, in keeping with the expanded remit of ET. The coverage is wide, including time series, panel, and microeconometric methods and models. Further theoretical research and empirical applications of these methods are to be expected in future work. We hope the special issue will inspire others to pursue these ideas.