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PERSONAL INFORMATION

Birth date: January 29, 1987 Citizenship: Brazilian

EDUCATION

2011 - June 2015 (expected)	Ph.D. in Economics, Universidad Carlos III de Madrid, Spain
2009 -2011	Master in Economics, Universidad Carlos III de Madrid, Spain
2007 – 2007	Visiting Student, University of Arkansas.
2005 – 2009	B.A. in Economics (Summa cum laude), IBMEC-MG, Brazil

REFERENCES

Miguel A. Delgado (Advisor)
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RESEARCH INTERESTS

Primary field: Econometric Theory.
Secondary fields: Microeconometrics, Applied Economics, Semi and Nonparametric Methods.

JOB MARKET PAPER

Nonparametric Tests for Conditional Treatment Effect Models with Duration Outcomes

This paper proposes different tests for treatment effects when the outcome of interest, typically a duration, is subjected to right censoring. Our tests are based on Kaplan-Meier integrals, and do not rely on parametric assumptions nor on shape restrictions. The proposed tests are consistent against any fixed alternatives and are able to detect a broad class of alternatives converging to the null at the parametric $n^{-1/2}$ –rate, n being the sample size. Finite sample properties of the proposed tests are examined by means of a Monte Carlo study. We illustrate the use of the proposed policy evaluation tools by studying the effect of labor market programs on unemployment duration based on experimental and observational datasets.

WORKING PAPERS

*Testing for Uncorrelated Residuals in Dynamic Count Models with an Application to Corporate Bankruptcy (**Revise and Resubmit, Journal of Business & Economic Statistics)***

This article proposes a new diagnostic test for dynamic count models, which is well suited for risk management. Our test proposal is of the Portmanteau-type test for lack of residual autocorrelation. Unlike previous proposals, the resulting test statistic is asymptotically pivotal when innovations are uncorrelated, but not necessarily iid nor a martingale difference. Moreover, the proposed test is able to detect local alternatives converging to the null at the parametric rate $T^{-1/2}$, with T the sample size. The finite sample performance of the test statistic is examined by means of a Monte Carlo experiment. Finally, using a dataset on U.S. corporate bankruptcies, we apply our test proposal to check if common risk models are correctly specified.

WORK IN PROGRESS

Covariate-Matching Estimation for Treatment Effects with Randomly Censored Outcomes

This paper proposes a covariate-matching methodology to estimate distributional treatment effects when the outcome of interest, typically a duration, is subjected to right censoring mechanisms. We analyze the large sample properties of matching estimators and establish a number of new results. First, we establish that our estimators converge weakly to non-zero mean Gaussian processes, and propose a bias correction. Second, in order to perform inference, we propose and prove the validity of a multiplicative-type bootstrap. In addition, we analyze the asymptotic properties of propensity score matching estimators, a tool commonly used when the number of continuous variables is larger than one. The finite sample performance of our procedures is examined by means of Monte Carlo experiments. The utility of the proposed methodology is demonstrated using different datasets.

Kaplan-Meier Distributional Regression (with Miguel A. Delgado and Andrés García-Suaza)

This paper proposes a flexible way of estimating the conditional distribution of an outcome that may be subjected to right censoring, the Kaplan-Meier distributional regression. The proposed estimator allows for heterogeneous impact of variables on different points of an outcome distribution, making it appealing in many applications. Moreover, the Kaplan-Meier distributional regression represents a useful alternative to popular alternatives: (i) in contrast with Cox duration regressions, our proposed estimator is suitable for non-proportional hazards; and (ii) different from censored quantile regression models, the Kaplan-Meier distributional regression does not require smoothness of the conditional density of the outcome of interest. The new estimator is easy to compute, only requiring small modifications to existing software's. We establish functional central limit theorems and bootstrap validity results for the Kaplan-Meier distributional regression process and some related functionals. Finite sample properties of the proposed method are examined by means of a Monte Carlo study. The utility of the proposed methodology is demonstrated using different datasets.

Nonparametric Covariate Balancing Propensity Score (with Xiaojun Song)

The propensity score plays a big role in a variety of treatment effects settings. Nonetheless, a main difficulty arises because the propensity score is usually unknown and it turns out that misspecification of the propensity score model may lead to biased and inconsistent treatment effect estimators. In this paper we propose a nonparametric sieve based propensity score estimator, which models treatment assignment while optimizing the covariate balance. Our estimation is carried out within a sieve minimum-distance approach, and statistical inference is straightforward since the proposed estimator is asymptotically normal. In simulations exercises, we show that taking advantage of the dual characteristic of the propensity score can improve the performance of different treatment effects estimators. We illustrate these potential gains analyzing the impact on post-intervention earnings of the National Supported Work Demonstration, a randomized labor training program carried out in the 1970s.

TEACHING EXPERIENCE

Graduate	Econometrics I (2012,2013, 2014), TA for the PhD Course at UC3M Statistics (2014), TA for the PhD Course at UC3M Introduction to Stata (2012, 2013, 2014), Master course at UC3M Statistics (2008), MBA and CBA courses at IBMEC-MG
Undergraduate	Econometrics I (2011, Evaluation: 4.00/5) Topics in Industrial Organization (2011, Evaluation :4.71/5) Price Theory and Econometrics I, (2008), at IBMEC-MG

PROFESSIONAL ACTIVITIES

Referee for Brazilian Review of Finance
Organizer of Student Seminar, Universidad Carlos III de Madrid, 2012- 2015
Member of the Econometric Society, 2014-onwards
Co-founder and main organizer of the Econometrics Reading Group, Universidad Carlos III de Madrid, 2010- 2013
Co-founder of the NEPOM – The Monetary Policy Research Group of IBMEC-MG, Brazil, 2008-2009.

OTHER EXPERIENCES

2006 Intern, Brazilian Central Bank, Belo Horizonte, Brazil

SCHOLARSHIPS, HONORS AND AWARDS

2013	1st Place at Econometric Game (UC3M Team Captain), Amsterdam, Netherlands.
2012-2015	PIF Scholarship, Universidad Carlos III de Madrid, Spain.
2012	Finalist at Econometric Game (UC3M Team Captain), Amsterdam, Netherlands.
2012	FPI Scholarship, Spanish Ministry of Science and Technology, Declined.
2011	Outstanding Teaching Assistant Awards 2010-2011, UC3M, Spain.
2009-2012	Graduate Program Scholarship, UC3M, Spain.
2009	Summa cum laude, IBMEC-MG, Brazil

SEMINARS AND CONFERECES

North America Winter Meeting of the Econometric Society, Boston, January 2015 (scheduled)
European Winter Meeting of the Econometric Society, Madrid, December 2014 (scheduled)
Symposium Spanish Economic Association, Palma de Mallorca, December 2014 (scheduled)
Seminar, Tilburg University, Tilburg, November 2014
Job Market Seminar, UC3M, Getafe, October 2014
European Meeting of the Econometric Society, Toulouse, August 2014
Student Seminar, UC3M, Getafe, June 2014
20th ENTER Jamboree, Stockholm, March 2014
Seminar, Universidade de São Paulo, Ribeirão Preto, August 2013 (invited)
15th Brazilian Time Series and Econometrics School, Teresópolis, August 2013
Student Seminar, UC3M, Getafe, June 2012
Spanish Stata Users Group Meeting, Madrid, September 2010
IV Encontro CAEN-EPGE , Fortaleza, June 2009

LANGUAGE AND COMPUTER SKILLS

Languages:	Native Portuguese , Fluent English, Advanced Spanish.
Computer Skills:	EVIEWS, Fortran, MATLAB, R, STATA, and LaTex.