

Doctorado en Economía
Universidad Nacional de La Plata

Seminario en Temas de Econometría
Agosto 2016

Información básica:

Profesor: Carlos Lamarche (email: clamarche@uky.edu;
url: <http://gatton.uky.edu/Faculty/lamarche/>)
Clases: 8, 9 y 10 de Agosto de 9:30 a 11:00, aula a confirmar.
Horarios de consulta: 8, 9 y 10 de Agosto de 11:00 a 12:30, oficina 521
Página web del curso: <http://gatton.uky.edu/faculty/lamarche/ec99/ec99.html>

Día	Tópico	Bibliografía
8 de Agosto	<p><i>Nuevos métodos de regresión por cuantiles:</i></p> <ol style="list-style-type: none"> 1. Fundamentals of Quantile Regression: Interpretation, Inference and Basic Hypothesis Testing 2. Quantile Regression Computation and Applications 3. Quantile Treatment Effects 4. Quantile Regression Models with Endogenous Variables 5. Panel Data Quantile Regression 6. Censored and Panel Duration Quantile Regression 	Koenker (2005) Reference List 1
9 de Agosto	<p><i>Nuevos modelos de datos de panel</i></p> <ol style="list-style-type: none"> 1. Large Panel Data Models and Cross-Sectional Dependence 2. Balanced Panel Data with Interactive Effects 3. Unbalanced Panel Data and Missing Data Models with Interactive Effects 4. Incidental Parameters and Nonlinear Panel Data 5. Nonparametric Panel Data Models 	Baltagi (2015) Reference List 2
10 de Agosto	<p><i>Nuevos desarrollos para high-dimensional models and big data</i></p> <ol style="list-style-type: none"> 1. Introduction, Basic Definitions and Challenges 2. High-dimensional and Sparse Models 3. L_1 and L_2 regularization 4. Lasso for Linear and Nonlinear Models 5. Machine Learning and Deep Learning algorithms 	Buhlmann and van der Geer (2011) Efron (2010) Hastie et al. (2015) Reference List 3

Libros:

1. Quantile Regression, Roger Koenker (2005), Cambridge University Press
2. The Oxford Handbook of Panel Data, Edited by Badi Baltagi (2015), Oxford University Press
3. Large Scale Inference: Empirical Bayes Methods for Estimation, Testing and Prediction, Bradley Efron (2010), Cambridge University Press.
4. Statistics for High-Dimensional Data, Peter Bullmann and Sara van der Geer (2011), Cambridge University Press.
5. Statistical Learning with Sparsity: The Lasso and Generalizations, Trevor Hastie, Robert Tibshirani and Martin Wainwright (2015), Chapman and Hall/CRC.

Papers:

Reading List 1

6. Abadie, Angrist, and Imbens (2003), "Instrumental Variables Estimates of the Effect of Subsidized Training on the Quantiles of Trainee Earnings", *Econometrica* 70.
7. Koenker, R., and K. F. Hallock (2001) "Quantile Regression", *Journal of Economic Perspectives* 15, 143-156.
8. Ma, L. and R. Koenker (2006), "Quantile Regression for Recursive Structural Models", *Journal of Econometrics*, 134, 471-506
9. Chernozhukov, V. and C. Hansen (2006), "Instrumental Quantile Regression Inference for Structural and Treatment Effect Models," *Journal of Econometrics*, 132, 491-525
10. Chernozhukov, V. and C. Hansen (2005), "An IV Model of Quantile Treatment Effects," *Econometrica*, 73, 245-261
11. Lee, S. (2007), "Endogeneity in quantile regression models: A control function approach", *Journal of Econometrics*, 141, pp. 1131-1158.
12. Chernozhukov V. and H. Hong (2002), "Three-Step Censored Quantile Regression and Extramarital Affairs," *Journal of the American Statistical Association*, 97, pp. 872-882.
13. Blundell, R. and J. Powell (2007), "Censored regression quantiles with endogenous regressors," *Journal of Econometrics*, 141, pp. 65-83.
14. Koenker, R. (2004), "Quantile Regression for Longitudinal Data", *Journal of Multivariate Analysis*, 91, pp 74-89.
15. Chernozhukov, V., J. Hahn, I. Fernandez-Val and W. Newey (2013), Quantile and Average Effects in Nonseparable Panel Models, *Econometrica*
16. Lamarche, C. (2010), "Robust Penalized Quantile Regression Estimation for Panel Data", *Journal of Econometrics*, 157, 396-408
17. Galvao, A. (2011), "Quantile Regression for Dynamic Panel Data with Fixed Effects", *Journal of Econometrics*.
18. Galvao, A., C. Lamarche, and L. R. Lima (2013), "Estimation of Censored Quantile Regression for Panel Data with Fixed Effects". *Journal of the American Statistical Association*, 108, pp. 1075-1089
19. Peng, L. and Y. Huang (2008), "Survival Analysis With Quantile Regression Models", *Journal of the American Statistical Association*, 103, 637-649.
20. Wang, H. J. and M. Fyngenson (2009), "Inference for Censored Quantile Regression in Longitudinal Studies", *Annals of Statistics*, 37, 756-781.
21. Portnoy, S. L. (2003), "Censored Regression Quantiles", *Journal of American Statistical Association*, 98, 1001-1012.
22. Kato, K., A. F. Galvao Jr., G. V. Montes-Rojas (2012), "Asymptotics for panel quantile regression models with individual effects", *Journal of Econometrics*.

Reading List 2

23. Pesaran, H. M. (2006), "Estimation and Inference in Large Heterogeneous Panels with a Multifactor Error Structure", *Econometrica*, 74, 967-1012
24. Chudrik, A. and Hashem Pesaran (2015), "Large Panel Data Models with Cross-Sectional Dependence", Chap. 1, the Oxford Handbook of Panel Data.
25. Bai, J. (2009), "Panel Data Models with Interactive Fixed Effects", *Econometrica*, 77, 1229-1279
26. Harding, M. and C. Lamarche (2014), "Estimating and Testing a Quantile Regression Model with Interactive Effects", *Journal of Econometrics*
27. Wooldridge, J. (1995), "Selection corrections for panel data models under conditional mean independence assumptions", *Journal of Econometrics*, 68, pp. 115–132
28. Kyriazidou, E. (2001), "Estimation of dynamic panel data sample selection models", *Review of Economic Studies*, 68, pp. 543–572.
29. Altonji, J. G. and R. L. Matzkin (2005), "Cross section and panel data estimators for nonseparable models with endogenous regressors", *Econometrica*, 73, pp. 1053–1102
30. Arellano, M. and B. Honoré (2001), "Panel Data Models: Some Recent Developments." In Handbook of Econometrics. Vol. 5.
31. Bai, J., Y. Liao and J. Yang (2015), "Unbalanced Panel Data Models with Interactive Effects", Chap. 5, the Oxford Handbook of Panel Data.
32. Hahn, J., and W. Newey (2003). "Jackknife and Analytical Bias Reduction for Nonlinear Panel Data Models." *Econometrica*, 72, 1295-1319.

Reading List 3

33. Belloni, A., V. Chernozhukov and C. Hansen (2014), "High-Dimensional Methods and Inference in Structural and Treatment Effects" *Journal of Economic Perspectives*, 28, 29-50.
34. Belloni, A., V. Chernozhukov and C. Hansen (2014), "Inference on Treatment Effects after Selection among High-Dimensional Controls", *Review of Economic Studies*, 81, 608-650.
35. Belloni, A., and V. Chernozhukov (2011), "L1-penalized quantile regression in high-dimensional sparse models," *The Annals of Statistics*, 39(1), 82–130.
36. Belloni, A., V. Chernozhukov, and K. Kato (2014), "Valid post-selection inference in high-dimensional approximately sparse quantile regression models," manuscript.
37. Chudik, A., G. Kapetanios and M. Hashem Pesaran (2016), "Big Data Analytics: A New Perspective", mimeo, USC
38. Harding, M., and C. Lamarche (2016), "Sparsity-Based Estimation of a Panel Quantile Count Data Model with Applications to Big Data", mimeo, Duke University
39. Harding, M., and C. Lamarche (2016), "A Panel Quantile Approach to Attrition Bias in Big Data: Evidence from a Randomized Experiment", mimeo, Duke University
40. Taddy, M. (2013): "Multinomial Inverse Regression for Text Analysis," *Journal of the American Statistical Association*, 108(503), 755–770.
41. Taddy, M. (2014): "Distributed Multinomial Regression," ArXiv e-prints.
42. Athey, S. and G. Imbens (2015), "Recursive Partitioning for Heterogeneous Causal Effects", ArXiv e-prints.