



Doctorado en Economía
Universidad de Buenos Aires

TÓPICOS AVANZADOS DE SERIES DE TIEMPO
2017

Profesor: Gabriel Montes Rojas (CONICET-IIIEP-BAIRES-UBA)

Email: gabriel.montes@fce.uba.ar

Página web: <http://gabrielmontes.com.ar>

Clases: Jueves de 10 a 13, aula 34

Programa de la materia

Este seminario está orientado a estudiantes de Doctorado con intereses en modelos de series de tiempo aplicados. Se verán los siguientes tópicos en forma de lectura guiada: modelos multivariados, modelos no lineales y regresiones por cuantiles.

1. Modelos VAR estructurales y VEC. Distintos enfoques

Enders, caps. 5,6.

Tsay, cap. 8.

Christiano, L.J., Eichenbaum, M. and Evans, C., 1996, "The Effects of Monetary Policy Shocks: Evidence from the Flow of Funds", *Review of Economics and Statistics*, 78(1), 16-34.

Christiano, L.J., Eichenbaum, M. and Evans, C., 1998, "Monetary Policy Shocks: What Have We learned and to What End", NBER Working Paper 6400.

Engle, R. and Granger, C., 1987, "Cointegration and Error Correction: representation, estimation and testing", *Econometrica*, 50, 251-276.

Johansen, S., 1988, "Statistical Analysis of Cointegration Vectors", *Journal of Economic Dynamics and Control*, 12(2-3), 231-254.

Johansen, S., 1992, "Cointegration in Partial Systems and the Efficiency of Single Equation Analysis", *Journal of Econometrics*, 52, 389-402.

Johansen, S., 1992, "Testing Weak Exogeneity and the Order of Cointegration in U.K. Money Demand", *Journal of Policy Modelling*, 14, 313-334.

Johansen, S. and Juselius, K., 1990, "Maximum Likelihood Estimation and Inference on Cointegration-With Application to the Demand for Money", *Oxford Bulletin of Economics and Statistics*, 52(2), 169-210.



Johansen, S., 1988, "Statistical Analysis of Cointegration Vectors", *Journal of Economic Dynamics and Control*, 12(2-3), 231-254.

Lütkepohl, H., 2005, *New Introduction to Multiple Time Series Analysis*, Springer-Verlag.

Ramey, V.A. 2016, "Monetary Shocks and Their Propagation", NBER Working Paper 21978. Ch. 2 in *Handbook of Macroeconomics*, John B. Taylor and Harald Uhlig (eds.) Volume 2, pp. 71-162.

Sims, C., 1980, "Macroeconomics and Reality", *Econometrica*, 48, 1-48.

Stock, J.H. and Watson, M.W., "2016 Dynamic Factor Models, Factor-Augmented Vector Autoregressions, and Structural Vector Autoregressions in Macroeconomics", Ch. 8 in *Handbook of Macroeconomics*, John B. Taylor and Harald Uhlig (eds.), Volume 2, pp. 415-425.

2. Modelos no lineales en series de tiempo

Enders, cap. 7.

Tsay, cap. 4.

Elliott, G., and Muller, U.K., 2006, "Efficient Tests for General Persistent Time Variation in Regression Coefficients", *Review of Economic Studies*, 73, 907-940.

Hansen, B.E., 1992, "Parameter Instability in Linear Models", *Journal of Policy Modeling*, 14, 517-533.

Hansen, B. E., 1996, "Inference when a nuisance parameter is not identified under the null hypothesis", *Econometrica*, 64, 413-30.

Hansen, B. E., 1997, "Inference in TAR models", *Studies in Nonlinear Dynamics and Econometrics*, 2, 1-14.

Hansen, B. E., 2000, "Sample splitting and threshold estimation", *Econometrica*, 68, 575-603.

3. Regresiones por cuantiles

Galvao, A., G. Montes-Rojas, and J. Olmo (2011). "Threshold quantile autoregressive models," *Journal of Time Series Analysis* 32(3), 253-267.

Galvao, A. F., G. Montes-Rojas, and S. Park (2013) "Quantile Autoregressive Distributed Lag Model with an Application to House Price Returns," *Oxford Bulletin of Economics and Statistics*, 75(2), 307-321.

Montes-Rojas, G. (2017) "Reduced form vector quantile regression," *Journal of Multivariate Analysis*, 158, 20-30, April 2017.

Koenker, R. (2005), *Quantile Regression*. Cambridge: Cambridge University Press.

Koenker, R. and Z. Xiao (2006) "Quantile Autoregression," *Journal of the American Statistical Association*, 101, 980-990.



Libros sugeridos para consulta (disponibles en PDF)

- Enders, W., 2014, *Applied Econometric Time Series*, 4th edition, Wiley & Sons, Inc., New York.
- Favero, C., 2001, *Applied Macroeconometrics*, Oxford University Press, Oxford.
- Hamilton, J., 1994, *Time Series Analysis*, Princeton University Press, Princeton.
- Hayashi, F., 2000, *Econometrics*, Princeton University Press, Princeton and Oxford.
- Hendry, D.F., 1995, *Dynamic Econometrics, Advanced Texts in Econometrics*, Oxford University Press.
- Johansen, S., 1995, *Likelihood-Based Inference in Cointegrated Vector Auto-regressive Models, Advanced Text in Econometrics*, Oxford University Press.
- Juselius, K., 2006, *The Cointegrated VAR Model, Advanced Texts in Econometrics*, Oxford University Press.
- Lütkepohl, H., 2005, *New Introduction to Multiple Time Series Analysis*, Springer-Verlag.
- Tsay, R. S., 2005, *Analysis of Financial Time Series*, Wiley & Sons, Inc., New Jersey.

Evaluación

Los alumnos serán evaluados en base a 3 trabajos prácticos (uno para series multivariadas, otro para modelos no lineales, otro para cuantiles) que consisten en buscar series de tiempo acordes a los temas vistos y preparar una presentación en clase de 20 minutos en cada caso. Los ejercicios prácticos pueden resolverse en grupos de estudiantes de no más de **3 (tres)** personas.

Material de clase

Las notas de clase estarán publicadas en mi página web <http://gabrielmontes.com.ar>. Las notas son un resumen, incompleto y engañoso, del material de lectura. De ninguna manera reemplaza a la lectura de los capítulos de libros y papers.