Master Class: Quantile Regression

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Suggested reading

1. Fundamentals

Download handout, 'Short course on quantile regression'
Koenker, R. and G. Bassett (1978), 'Regression quantiles', *Econometrica*, 46, 33-50.
Koenker, R. and K. Hallock (2001), 'Quantile Regression', *Journal of Economic Perspectives*, 15, 143-156.
Buchinsky, M., (1998), 'Recent Advances in Quantile Regression Models: A practical guide for empirical research', *Journal of Human Resources*, 33, 88-126.

2. Computation

Koenker, R. (2002), 'Quantile Regression Reference Manual for R'.
Portnoy, S. and R. Koenker (1997), 'The Gaussian Hare and the Laplacian Tortoise: Computability of Squared-error vs. Absolute-error Estimators', *Statistical Science*, 12, 279-300.

3. Duration Models

Koenker, R., and O. Geling (2001), 'Reappraising Medfly Longevity: A quantile regression survival analysis,' *Journal of the American Statistical Association*, 96, 458-468.

4. Censoring and Binary Response

Powell, J.L. (1986), 'Censored regression quantiles', *J. of Econometrics*, 32, 143-55.
Kordas, G. (2001), 'Smoothed Binary Regression Quantiles'.
Portnoy, S. (2002), 'Censored Regression Quantiles'

5. Inference

Gutenbrunner, C., J. Jureckova, R. Koenker, and S. Portnoy, (1993), 'Tests of Linear Hypotheses based on Regression Rank Scores', *Journal of Nonparametric Statistics*, 2, 307-331.
Koenker, R., and J. Machado (1999), 'Goodness of fit and related inference processes for quantile regression,' *Journal of the American Statistical Association*, 94, 1296-1310.
Koenker R., Z. Xiao (2001), 'Inference on the Quantile Regression Process', *Econometrica*, 70, 1583-1604.

6. Non-parametric Quantile Regression

Welsh, A.H. (1996), 'Robust estimation of smooth regression and spread functions and their derivatives', *Statistica Sinica*, 6, 347-366.
Koenker, R., P. Ng, and S. Portnoy (1994), 'Quantile Smoothing Splines,' *Biometrika*, 81, 673-80.
Koenker, R. and I. Mizera (2002), 'Penalized Triograms: Total Variation Regularization for Bivariate Smoothing'.

7. Portfolio Allocation

Bassett, G., R. Koenker and G. Kordas (2002), 'Pessimistic Portfolio Allocation and Choquet Expected Utility'.

9. Time Series

Koenker R. and Q. Zhao, 'Conditional Quantile Estimation and Inference for ARCH Models', *Econometric Theory*, 12, 793-814.
Koenker R., Z. Xiao (2002), 'Quantile Autoregression, Unit Roots, and Asymmetric Interest Rate Dynamics'.