Chapter 8
What Have We Learned from Quantile Regression? Implications for Economics and Finance

Abstract In this chapter, we conclude and we emphasize that quantile regression is suitable for predictive modeling when the response is asymmetric or non-normally distributed conditional on the covariates. We note that usually, the model aims at the lower or upper percentiles of the response.

In recent years, there is a booming of interest in the analysis of risk in all domains of economics and finance. This is so because most policy decisions are aimed at scenarios that can be catastrophic. Then, noncentral scenarios and extreme quantiles become of primary interest.

We believe that the quantile regression offers a unique approach that can be helpful in many areas of economics and finance by providing a way to predict the conditional distribution of a dependent variable.

By looking at quantiles, especially at low percentiles (5% or 10%) or at high percentiles (90, 95%), we can predict the scope of a dependent variable. This is like its major domain, or the interval that is expected to contain the majority of values given the information on the covariates. This is done in such a way that there is no assumption of normality, which assumes that these quantiles are located symmetrically around the mean of the conditional distribution.