# Yield curve with a threshold driving process

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**Abstract**

The interest rate of a government bond is a function of its time to maturity. Such a function is called a yield curve. When we observe these curves over time, they form a time series of curves. It is interesting and important to study the dynamics of such a curve time series and provide a method for prediction of future curves. In this talk we use the Nelson-Siegal curve to model the yield curve. The time-varying coefficients of the Nelson-Siegal curves, called the driving process, are then modeled with a threshold vector AR model. Statistical inference and prediction methods are discussed. We also report an empirical study using US interest data.