This paper examines the extension of the Nelson-Siegel three-factors model and the Nelson-Siegel-Svensson four-factor model, for the purpose of adjusting and forecasting the term structure of interest rates on Mexican government bonds.

Due to the fact that the factors of the models do not remain constant throughout the period, but vary over time, I propose the models used by Yu and Zivot for factors forecast: a multivariate vector autoregressive VAR (1) and univariate AR (1). Yu and Zivot also use the State Space Model and this document is open for future research. As expected, using more flexible models leads to a better adjustment of the fee structure and this will be shown using the rates curve.

Keywords: structure of interest rates, forecast, AR, VAR, Nelson-Siegel, Svensson.