

## **Abstract**

This paper proposes the drift and diffusion function that can nest for all existing single-factor interest rate model. The drift functions can be classified to general model and linear drift model. The difference between these models is the non-linear term. This paper examines the effect on the significance of non-linear term based on three different data sets, inter-bank overnight rate, seven-day R/P rate, and one-month T-bill, and three different diffusion functions, affine diffusion function, CEV diffusion function, and combined form diffusion function by using log-likelihood ratio test. We find that the choice of the data sets and the choice of diffusion functions used do not affect the strength of the significance of the non-linearity when using Thai data.