ON SKEWNESS IN INTEREST RATES

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ABSTRACT

This paper proposes a model for interest rates under a non-Gaussian assumption. We move from the unsuitability of the Brownian motion for modelling the path of interest rates and rather consider a stylized fact for financial quantities: skewness. In particular, we introduce and discuss a discrete time extension of the Vasicek model under a skew distribution. In this framework, a closed form formula for the unconditional dynamics of the interest rates is derived. Moreover, we compute the price for zero-coupon bond under skewness.

\textbf{Classification JEL:} C18, C49, G12
\textbf{Keywords:} Closed Skew Normal, Interest rates, Skew Vasicek, Bond pricing

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