The Valuation of Range Notes under Affine Term Structure Models

Bong-Gyu Jang† and Ji hee Yoon*

October, 2008

ABSTRACT

In this paper, we find analytic formulas for range accrual notes and spread range accrual notes in the context of the affine term structure model. Two important implications in hedging market risks are derived: Firstly, the hedging strategy for range accrual notes significantly depends on the choice of the underlying interest rate model. Secondly, the ambiguity of the correlation between underlying interest rates of spread range accrual notes can give a big difficulty to the traders in valuing them.

†Department of Industrial and Management Engineering, POSTECH, Pohang, Korea. E-mail: bonggyujang@postech.ac.kr

*Department of Mathematical Science, KAIST, Daejeon, Korea. E-mail: zich@kaist.ac.kr