

Université catholique de Louvain
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Discrete time semi-Markov switching interest rate models

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Abstract.

The outline of the presentation is as follows; the first part will be a short reminder of modern interest rate theory and in particular of the Ho and Lee model. We will briefly recall some key results from the theory of semi-Markov processes. We will follow by a presentation of a semi-Markov regime switching model for interest rates. This will lead us to the notion of absence of arbitrage and martingale measures. We will also discuss some further implications of our model such as recombining trees. We will then conclude and present some future extensions.