

Pricing Options Using the Tree Method in a Switching Model with State Dependent Switching Rates

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Abstract: In this project we develop and test a tree method for pricing both European and American options in a regime-switching model where the switching rates depend on the underlying price process. The tree grows linearly as the number of time steps increases. Thus it enables us to use large number of time steps to obtain more accurate approximations of the true option prices. A number of examples are reported.