

Interest Term Structure

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Summary

After an introduction of the basic notions and concepts for discrete models the pricing of zero bonds and their derivatives are investigated in the main chapters. Starting with a general introduction in the theory of martingale measures the classical one factor models are introduced and their pro and cons are discussed. Then by using the forward rate and the Heath Jarrow Morton approach the change of numeraire and the application of forward measures are presented. With the help of these technical tools general derivatives, as caps, floors and swaps are priced.

Basic for the understanding is knowledge on stochastic analysis. Thus, this lecture is based on an introduction in finance mathematics. It is a course of 2 hours per week.

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