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tr_blackkarasinski1d_swaption

Black-Karasinski models [1] are defined by an EDS which describes the evolution of the spot rate $r(t)$:

$$\left\{ d\ln r_t =)(\theta_t - a\ln r_t)dt + \sigma\, dW(t), \quad r(0) = r_0 \right.$$

Where the function θ is a deterministic function totally given by the market values of the zero coupon bonds.
The pricing procedure [**?**] is in two steps: in the first step built the short-rate tree that fit yield curve data, the second step is standard backward pricing algorithm.

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References

[1] F.Black and P.Karasinski. Bond and option pricing when short rates are lognormal. *Financial Analyst Journal*, Juli-August:52–59, 1991. 1