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# A model-insensitive determination of First-hitting-time densities with Application to Equity default-swaps

Alex Langnau

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Equity default-swaps pay the holder a fixed amount of money when the underlying spot level touches a (far-down) barrier during the life of the instrument. While most pricing models give reasonable results when the barrier lies within the range of liquidly traded strikes of plain-vanilla option prices, the situation is more involved for extremely out-of-the money barriers. In this paper we discuss a model-insensitive approach for the determination of first hitting times that does not rely on the full a priori knowledge of the stochastic process for the price dynamics. Hence more robust pricing and hedging results are expected as a result of this analysis. In contrast to stochastic volatility-models our approach is well suited for the conservative pricing of equity default-swaps.

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|---|---|
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