Pricing Constant Maturity Credit Default Swaps Under Jump Dynamics

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Abstract: In this paper we discuss the pricing of Constant Maturity Credit Default Swaps (CMCDS) under single sided jump models. The CMCDS offers default protection in exchange for a floating premium which is periodically reset and indexed to the market spread on a CDS with constant maturity tenor written on the same reference name. By setting up a firm value model based on single sided Lévy models we can generate dynamic spreads for the reference CDS. The valuation of the CMCDS can then easily be done by Monte Carlo simulation.

Keywords: Single sided Levy processes; Structural models; Credit risk; Default probability; Constant Maturity Credit Default Swaps; Monte Carlo methods

JEL subject category: C02, C15, C63, G12

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