Title: Implementation of Intensity Model Approach to CMCDS Pricing

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Abstract: Constant maturity credit default swaps (CMCDS) are useful as hedging tools. In intensity model approach, the default time is defined as the first arrival time of the Poisson process. From the market quotes of CDS forward rates and bonds, we are able to numerically compute the default probabilities. Approximating CMCDS price depends largely on CDS forward rates’ volatilities and their correlations. We implement the price algorithm based on Brigo’s work (2006). Starting with current market data such as CDS forward rates and non-defaultable bond prices, we describe steps involved to obtain the price CMCDS. We demonstrate the impact of convexity on the CMCDS price structure.