

Counterparty credit risk pricing as first to default.

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Abstract

When incorporating counterparty credit risk into derivatives pricing it is important to make sure that the pricing equations are symmetric with respect to default events of both parties. It is straightforward to show that counterparty credit risk adjustment can be viewed as an exotic "first to default" contract with notionals of the payoffs linked to the MtM of the reference product. Although this view is only natural, it has not been widely explored in the literature. This note therefore reviews semianalytical pricing of the general NTDs and FTDs and shows how these pricing algorithms can be reused in pricing the counterparty credit risk adjustments.

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