

CoCos under-short term uncertainty

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In this paper, see [1], we analyze an extension of the Jeanblanc and Valchev [4] model by considering a short-term uncertainty model with two noises. It is a combination of the ideas of Duffie and Lando [2] and Jeanblanc and Valchev [4]: share quotations of the firm are available at the financial market, and these can be seen as noisy information about the fundamental value, or the firm's asset, from which a low level produces the credit event. We assume there are also reports of the firm, release times, where this short-term uncertainty disappears. This credit event model is used to describe conversion and default in a CoCo bond.

References

- [1] J.M. Corcuera and A. Valdivia. (2016). CoCos under short-term uncertainty. *Stochastics*, 1-15, 2016.
- [2] D. Duffie and D. Lando. Term structure of credit spreads with incomplete accounting information. *Econometrica*, 69(3), 633–664, 2001.
- [3] R. Jarrow P. Protter U. Çetin and Y. Yildirim. Modelling credit risk with incomplete accounting information. *Annals of applied probability*, 14(3):1167–1178, 2004.
- [4] M. Jeanblanc and S. Valchev. Partial information and hazard process. *International Journal of Theoretical and Applied Finance*, 8:807–838, 2005.