# Discussion of *Crashes and Collateralized Lending* by Jakub Jurek and Erik Stafford

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Do we need to be using such an involved description?

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because  $C'(K) = -e^{-rT} \mathbb{P}(K < V_T)$ 

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None of this requires any distributional assumptions about V.

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which can be rearranged in terms of the call, digital and underlying as

$$\Psi(w) \equiv \mathbb{E} \left[ \rho V_T - \rho (V_T - \bar{D})^+ + (1 - \rho) \bar{D} I_{\{V_T \ge \bar{D}\}} \mid \bar{W}_T = w \right]$$

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A CDO tranche with attachment points 0 < a < b < 1 will deliver

$$\frac{1}{b-a}\left\{\left(\frac{\Psi(w_T)}{\bar{D}}-(1-b)\right)^+\wedge(b-a)\right\}$$

at time T .

# Another picture

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Credit spread vs leverage of bond-issuing firms Sigma = 0.4, r = 0.05, T = 1, recovery = 0.6 Lower attachment point = 7%, upper = 10%, beta = 0.2





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