The Value of Timing Risk

In the talk, we are interested in the risk to cover (some portion of) the price of the option at a default time. The risk, which we call timing risk, is a risk of uncertain dividend, especially of its payment time. Credit derivatives typically are exposed to the risk. We will discuss how it could be hedged by a static position of European path-independent options, generalizing P. Carr and J. Picron (1999) where they applied the semi-static hedging formula of barrier options to hedge a payment at a stopping time in a Black-Scholes environment. We will give an exact hedging formula in an multi-dimensional general diffusion setting.