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Albert Cohen* (albert@math.msu.edu), C336 Wells Hall, 619 Red Cedar Rd., East Lansing, MI 48824, and **Nick Costanzino**. *Bond and CDS Pricing with Stochastic Recovery: Moody's PD-LGD Correlation Model*.

Classical credit risk and pricing models typically assume that the expected recovery at default is constant, or at the very least independent of the default probability. However, a large body of recent empirical evidence has challenged this assumption and shown that default rates are in fact negatively correlated with recovery rates. Recently, Moody's Analytics proposed a model in the context of credit capital which incorporates this empirically observed correlation within a structural framework. In this work we revisit Moody's PD-LGD (Probability of Default- Loss Given Default) and in the process complete and extend several results. We then price Bond and Credit Default Swaps with recovery risk using the PD-LGD model under both the Merton and Black-Cox default assumptions, and in addition compute associated risk metrics and Greeks. Our results are then compared with classical results which assume no recovery risk. (Joint work with Nick Costanzino, RiskLab, University of Toronto) (Received January 05, 2015)