

Modification 4: Idiosyncratic losses

$$dk_t^i = g k_t^i dt + \sigma k_t^i dZ_t + k_t^i dJ_t^i$$

J_t^i is an idiosyncratic compensated Poisson loss process, recovery distribution F and intensity $\lambda(\sigma^P)$

$v_t = k_t p_t$ drops below d_t , costly state verification by debt

- Debtholders' loss rate

$$\lambda(\sigma^P) v \int_0^{\frac{d}{v}} \left(\frac{d}{v} - x\right) dF(x)$$

- Verification cost rate

$$\lambda(\sigma^P) v \underbrace{\int_0^{\frac{d}{v}} c x dF(x)}_{C\left(\frac{d}{v}\right)}$$

- Leverage bounded not only by precautionary motive, but also by the cost of borrowing

Asset	Liabilities
$v_t = k_t p_t$	$d_t = k_t p_t - n_t$
	n_t