~~X~~ $t \leftarrow seq(0, 10, 0.001)$

$U(t) = u + ct - S(t)$ ← No of policies

Aggregate Claim ← $S(t) = \sum_{i=1}^{N} I_i(t) \; X_i$

Amount → : $X_i \sim exp(\lambda)$ ⟶ Sum assured for ith policy.

→ mortality

$I_i(t) \sim B(1, p_i(t))$

↳ $t \rightarrow U(0,1)$

$\Longrightarrow$ $I_i(t) = 0, \; t > d$

∴ $d = \min(t \mid I_i(t) = 1)$