

$$M(T) = \begin{cases} \frac{\log \varepsilon}{\log(1 - P(T))} = \frac{\log(1 - P_*)}{\log(1 - P(T))}, & \text{if } P(T) < P_* \\ 1, & \text{if } P(T) \geq P_* \end{cases}$$