Definition 2.3. *A blockchain protocol* $(\Pi, \mathsf{extract})$ *has* chain quality $T_0(\cdot), \mu(\cdot,\cdot,\cdot,\cdot)$ in Γ environments, *if for all* Γ*-admissible* $(n(\cdot), \rho, \Delta(\cdot), A, Z)$, *there exists some negligible function* ϵ *such that for every* $\kappa \in \mathbb{N}$ *and every* $T \geq T_0(\kappa)$ *the following holds:*

$$\Pr\left[\mathsf{view} \leftarrow \mathsf{EXEC}^{(\Pi,\mathsf{extract})}(A, Z, \kappa) : \mathsf{quality}^T(\mathsf{view}, \mu(\kappa, n(\kappa), \rho, \Delta(\kappa))) = 1\right] \geq 1 - \epsilon(\kappa)$$