

Tuning η as a function of T

- ▶ trivially $\min_i L_i \leq T$, yielding

$$L_{\text{Hedge}(\eta)} \leq \min_i L_i + \sqrt{2T \ln N} + \ln N$$

- ▶ per iteration we get:

$$\frac{L_{\text{Hedge}(\eta)}}{T} \leq \min_i \frac{L_i}{T} + \sqrt{\frac{2 \ln N}{T}} + \frac{\ln N}{T}$$