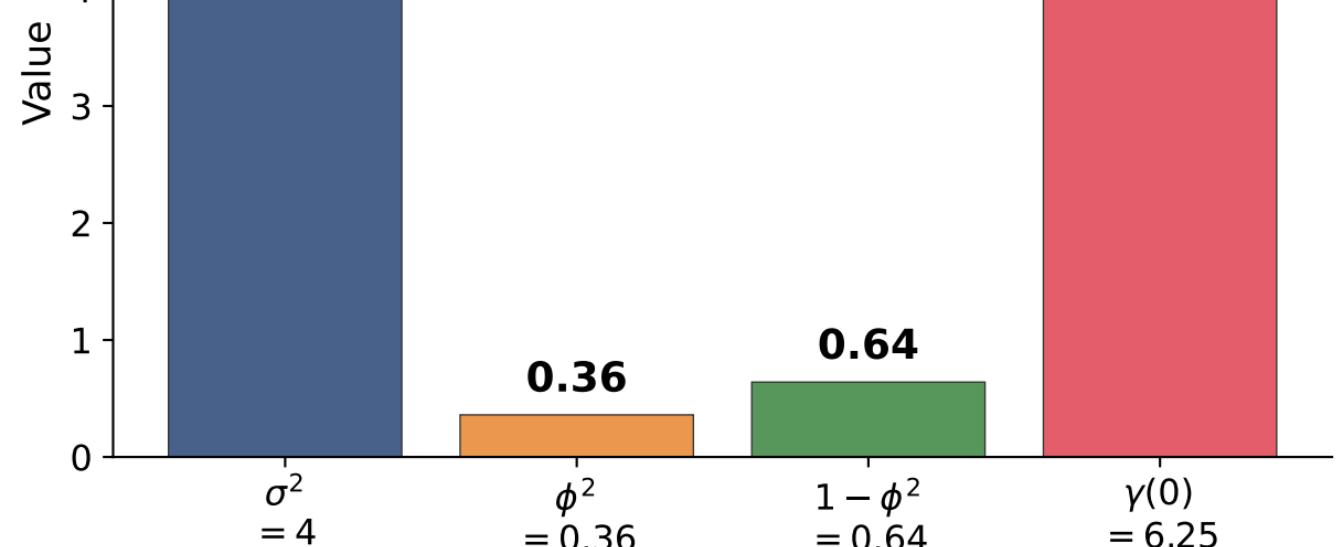$$\gamma(0) = \frac{\sigma^2}{1-\phi^2}$$

Variance grows as $|\phi| \to 1$

$\gamma(0) = 6.25$

$\sigma^2 = 4$

$\text{Var}(X_t)$

ϕ

Value

σ^2 = 4 — 4.00

ϕ^2 = 0.36 — 0.36

$1-\phi^2$ = 0.64 — 0.64

$\gamma(0)$ = 6.25 — 6.25