



Sometimes, it is hard for us to decide which portfolio is better so we introduce a new term called sharpe ratio

But wait, there's more!

- SR can vary widely depending on how frequently you sample
- SR is an annual measure
- $SR_{annualized} = K * SR$
- $K = \sqrt{\text{\# samples per year}}$

daily  $K = \sqrt{252}$   
 weekly  $K = \sqrt{52}$   
 monthly  $K = \sqrt{12}$

$$SR = \sqrt{252} * \frac{\text{mean}(\text{daily-rets} - \text{daily-rf})}{\text{std}(\text{daily-rets})}$$

Daily\_rf : daily risk free [無風險利率](#) > 指的像是把錢存放在銀行裡的利率