

~~Risk Neutral World~~  
 Academic  
 Dry & Risky  
 Abstract Prob. Theory  
~~Doc~~

$p^i$  = risk-neutral probability

~~Real World~~

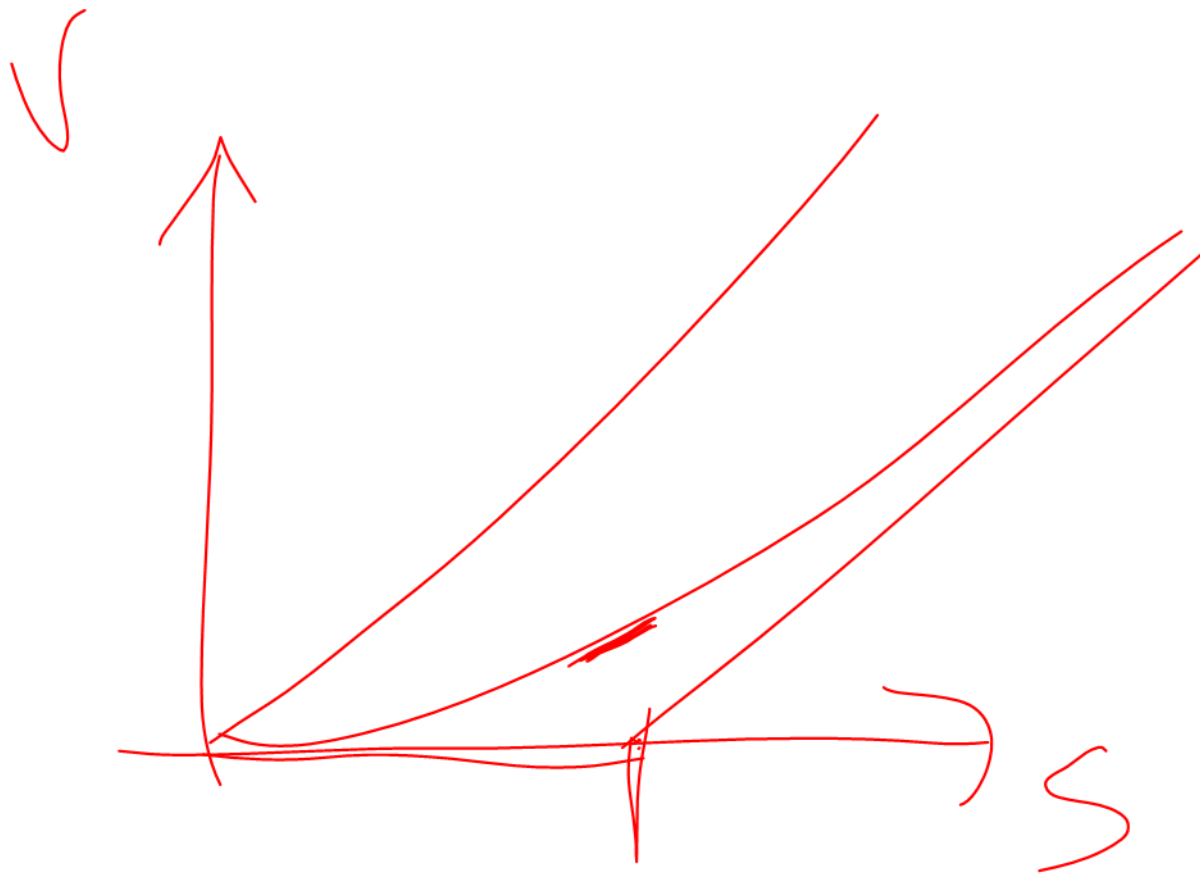
Data  
 stats  
 Risk

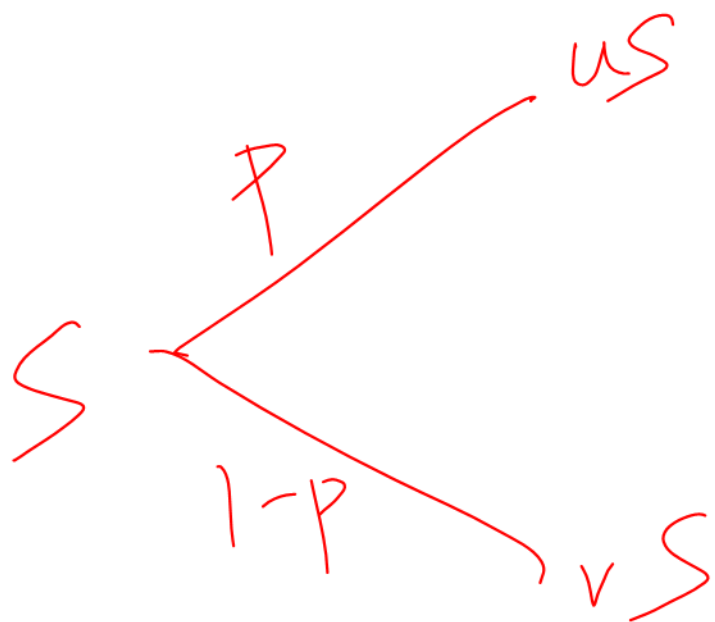


$100 \xrightarrow{p^i=0.5} 99$   
 $100 = p^i \cdot 101 + (1-p^i) \cdot 99$   
 $p^i = 0.5$

$\begin{matrix} \times & 1 \\ & p^i \\ & \times \\ & 1-p^i \\ & 0 \end{matrix}$







$$\boxed{p u S + (1-p) v S} - S = \mu S \Delta t$$



$$S^2 \left( p \left( u - (p u + (1-p) v) \right)^2 + (1-p) \left( v - (p u + (1-p) v) \right)^2 \right)$$

















