

# Success and Failure of “ Experts” (1)

- Outperform some benchmark by 15%, with 10% error rate per annum
- $\mu = 15\%$   $\sigma = 10\%$

Probability of success at different scales	
Scale	Probability
1 year	93%
1 quarter	77%
1 month	67%
1 day	54%
1 hour	51.3%
1 minute	50.17%
1 second	50.02%

## Success and Failure of “ Experts” (2)

- Underperform some benchmark by 15%, with 10% error rate per annum
- $\mu = -15\%$   $\sigma = 10\%$

Probability of failure at different scales	
Scale	Probability
1 year	93%
1 quarter	77%
1 month	67%
1 day	54%
1 hour	51.3%
1 minute	50.17%
1 second	50.02%

## Success and Failure of “ Experts” (3)

- Underperform some benchmark by 15%, with 10% error rate per annum
- $\mu = -15\%$   $\sigma = 10\%$
- For 1000 “experts”,  $7\% \times 1000 = 70$  are successful.

Probability of success at different scales	
Scale	Probability
1 year	7%
1 quarter	23%
1 month	33%
1 day	46%
1 hour	48.7%
1 minute	49.83%
1 second	49.98%