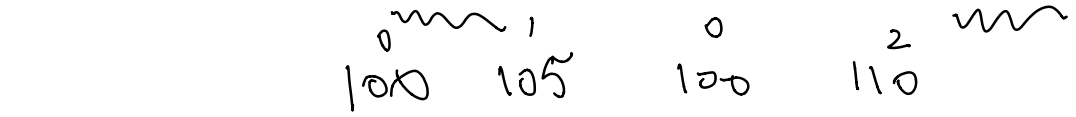
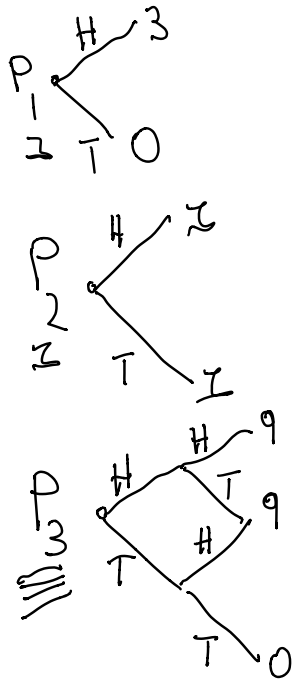
Bank A: $r_a = 5\%$ Bank B $r_b = 10\%$



Out of business



$P_1 = 1$

$P_2 = 1$

$P_3 = ?$

Basic proposition #1: You pay £1. I flip a coin.
- If it is heads, you get £3.
- If it is tails, you get nothing.

Basic proposition #2: You pay £1. I flip a coin.
- If it is heads, you get £1.
- If it is tails, you get £1, as well.

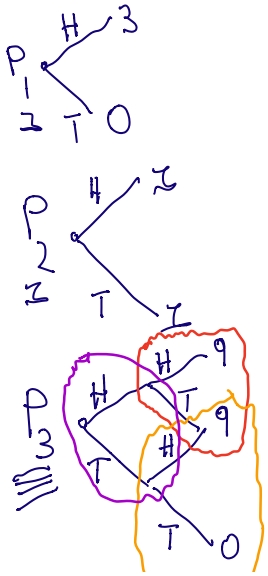
New proposition: I flip the coin twice.
- If at least one flip is heads, you get £9.
- If no flip is heads, you get nothing.

"FREQUENTIST"

$P(H) = P(T) = 1/2$

$P_3 = \frac{3}{4} \times 9 = 6.75$ ← Expected Value / Payoff

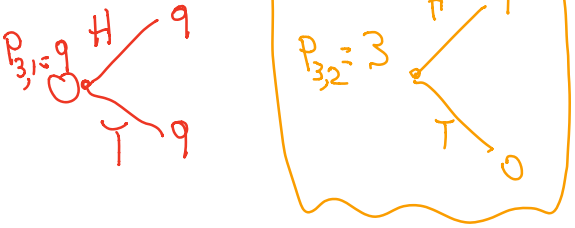
Financial Concepts



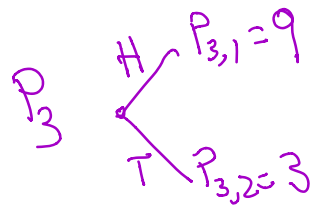
$P_1 = 1$ ← Risky Asset (Stock)

$P_2 = 1$ ← Bank (zero interest rate)

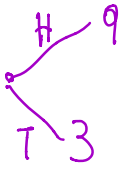
$P_3 = ?$



$P_3 = 5$



$P_3 = 3 + 2 = 5$



3 (Bank) + 2 (Stock) = 5