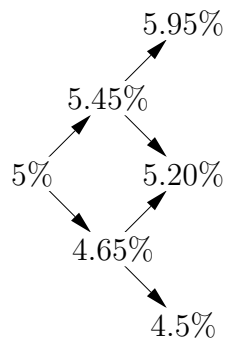


## Problemset 5 - Fixed Income

### Problem 1

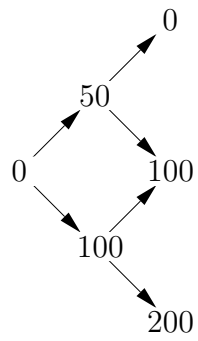
The following tree describes the possible spot rates over the next year.



The risk-neutral probabilities are 50/50.

- a) Compute the value of a bond that pays 5% semi-annual coupon and has 1.5 years maturity at each node in the tree.

b) A financial derivative pays the cash flows



Find the time 0 value of this derivative.