

FIGURE 2.1: A schematic representation of a single-period model with two scenarios. B is a risk-free asset. S is a risky asset with two time- T prices, $S^\pm = S_T(\omega^\pm)$.

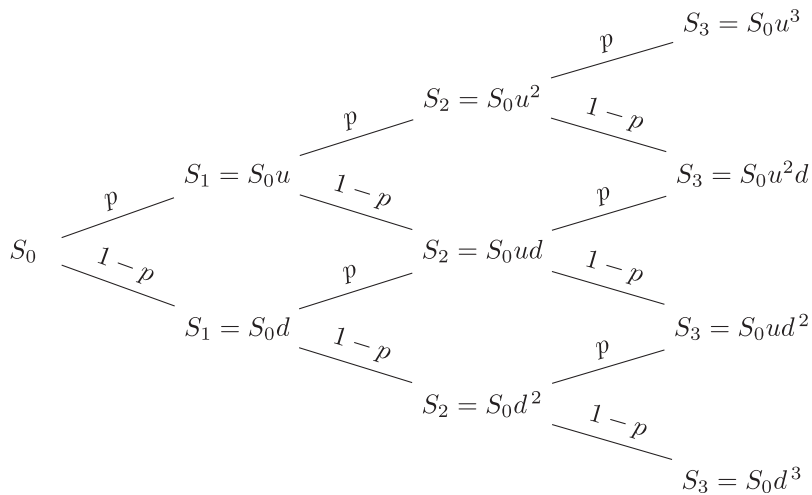


FIGURE 2.2: A schematic representation of the binomial lattice with three periods.

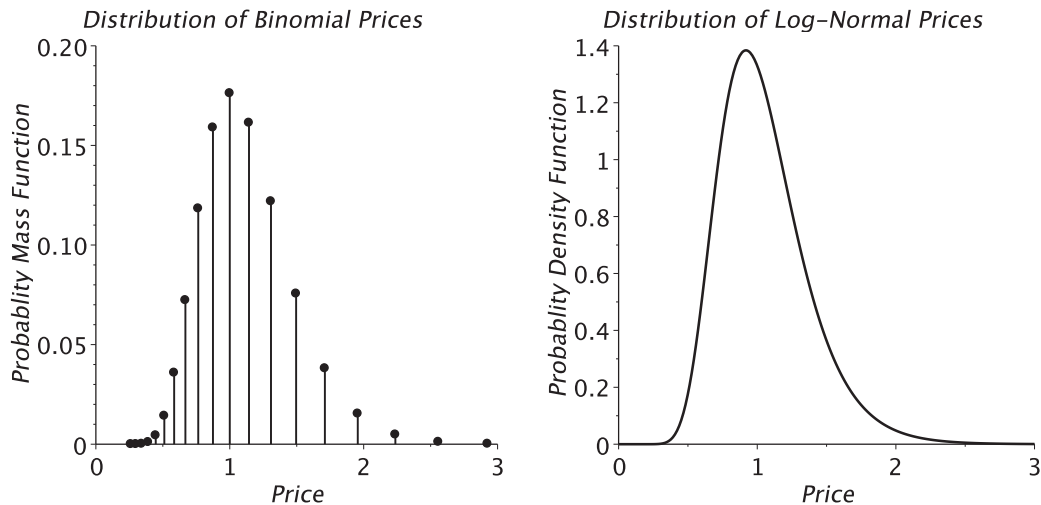


FIGURE 2.3: The probability distributions of asset prices in the binomial tree model (a) and log-normal model (b). The initial price is $S_0 = 1$; the time to maturity is $T = 1$; the binomial tree model has $N = 20$ periods; the model parameters are $\mu = 1\%$ and $\sigma = 30\%$.

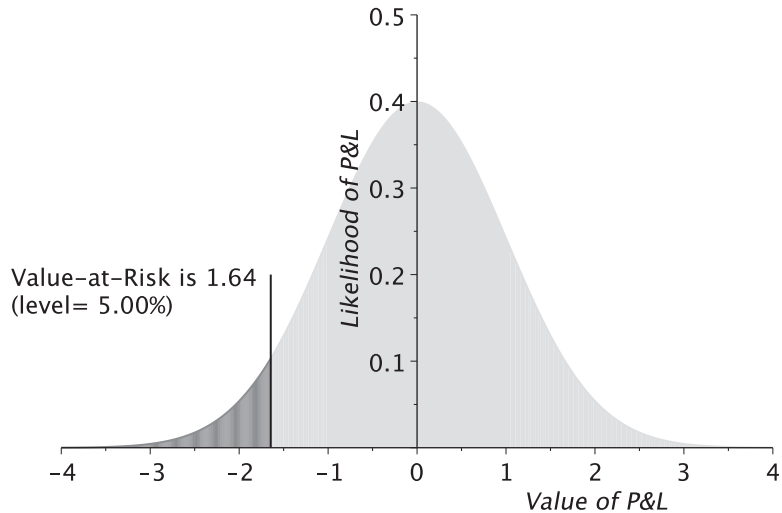


FIGURE 2.4: The Value-at-Risk diagram for a standard normal Profit-and-Loss PDF. The light-grey area to the right of the line represents 95% of the total area under the curve. The dark-grey area to the left of the line represents 5% of the total area under the curve.

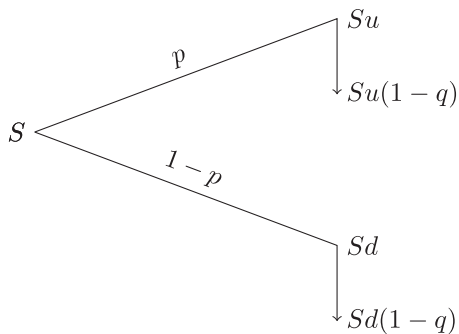


FIGURE 2.5: A single-period binomial model for a stock with dividends.