In current study we have single stock whose price observe a switching geometric Brownian motion. Also, the stock pay no dividends. Given the current price of a stock the sold axiom consists of target price and stop-loss limit. A ‘sell’ decision is made when the price reach either the target price or the set stop loss limit. The main purpose is to benefit investors. During their financial careers, one investor often pick up the a bad weak stock or the purchase it made is at the wrong time to reality. So, in both the cases, it is often wise and necessary to sell such a stock as soon as possible to curtail losses. In practice, target prices are typically around a gain of 15%–5.5% and stop-loss limit generally vary from 5% to 20%. However, however, it is not a good idea to adopt uniform rules for booking profits and losses taking because each stock different, has its own characteristics that call for. Moreover, it should be treated differently with different liquidation rules.

In this study, we consider set of target prices and stop-loss limits and choose a target price and stop-loss limit in that set to enhance an expected reward function. We aim at deriving this price limits...

In addition, we get the expected target period and the probability of making and losing money. In practice, investors frequently used criteria for measuring the portfolio performance of portfolio as the percentage return over a given time unit time. However, however, such a criterion has lead to many transactions because of it encourages, taking small profit-taking within the a short-brief holding time period (τ0) and increases transaction costs. For those reasons and others it may be. Clearly, such a criterion is unsuitable for retail investors, especially those because who of the cannot limited time available for constantly monitor their portfolios trading and additional transaction costs. In contrast, A discount factor, in contrast reduces out vary the frequency and cost of transactions, because it replaces the time as a determinant of holding period factor is replaced by discount rate. This da
discounted-reward function is natural in many financial problems commonly applied to many financial problems.

This study examines a no-dividend stock with prices that exhibit regime-switching geometric Brownian motion. We consider sets of stop-loss limits and target prices and determine those that promise to enhance an expected reward function. We aim to derive these limits as well as an expected holding period and probabilities of making and losing money.