We consider a single stock whose cost observes a regime-switching geometric Brownian motion and that which pays no dividends in the current study. Given the current price of the shares, sold axiom is configured target price and stop-loss limits. “Sell” decisions are made when any target price or price setting is reached or when the stop-loss limit is reached. One often picks up the bad stock or the makes purchases made is at the wrong time in reality. So, it is necessary to sell it as soon as possible to stop losses. In practice, a target price is typically around a gain of around 15.5% – 5.5%, and a stop-loss limit generally vary from 5% – to 20%. It is, however, not a good idea to adopt uniform profit-taking. Each stock is different and has its own characteristics. Moreover, it each stock should be handled differently with based on different rules of liquidation.

In this study, we consider a set of target prices and stop-loss limits and choose target prices and a stop-loss limit in that set the values for these parameters that to enhance an expected reward function. In addition, we aim at deriving this price limits. We also get obtain the expected target period that is expected and the probability of losing money to make money. The most commonly used criterion is, in fact, for measuring the performance of the portfolio is the return rate is per hour. However, such a criterion has lead to many transactions because of it encourages small some profit-taking within a short holding time τ0. Clearly, such a criterion is not suitable for retail investors. The reasons for this is the limited time available for trading and additional transaction costs. A discount factor, in contrast, rules out very frequent transactions because the time factor is replaced by a discount rate. This discounted reward function is natural in many financial problems.