In this study, we consider a single stock whose cost exhibits a regime-switching geometric Brownian motion and that which pays no dividends. The current price of the shares is sold as an axiom and configured based on target price and stop-loss limits. "Sell" decisions are made when any target price, or price setting, or stop-loss limit is reached or stop-loss limit is reached. Investors often choose to sell at the wrong time in reality, and they must. So, it is necessary to sell bad purchases as soon as possible to stop their losses. In practice, a typical target price is typically around a gain of around 15%—55%, and while stop-loss limits generally vary from 5% to 20%. However, it is inadvisable, however, not a good idea to adopt uniform profit-taking because each stock is different and has unique characteristics. Moreover, 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 price and a stop-loss limit in that set the values for these parameters that enhance an expected reward function. In addition, we aim at deriving these price limits. In addition, we get the expected target period that is expected and the probability of losing money to make money. The most commonly used criteria in fact, for measuring the portfolio's performance is the return rate per hour. However, using this criterion has lead to generating many transactions because it encourages small profit-taking within a short holding time t₀. Clearly, such a criterion is clearly not suitable for retail investors because of the. The reason for this is the limited time available for trading and the additional transaction costs. In contrast, applying a discount factor in contrast rules one eliminates the need for very frequent transactions because the time factor is...
replaced by a discount rate. This discounted-reward function is natural common in many financial problems.