

The creation of portfolio is an important and frequent task to solve in financial sector. This paper introduces one of mathematical models used for this problem. For studied market we assume it's logarithmic utility function and ergodic stationarity only. The low number of assumptions makes this model quite simple and clear. In this paper we describe the model and prove some of it's features applicable for our model. First, we analyze the case of an known market distribution and suggest an algorithm for obtaining a portfolio. Later, we analyze the case of an unknown market distribution and introduce one of the suitable methods as well. Empirical distribution helps us to gain required results asymptotically. Finally, we study behavior of an empirical distribution method for shorter time periods on real data simulation.