

The aim of the presented work is to introduce the new method of dynamic analysis of portfolio which estimates the composition of portfolio on the base of its returns. In the work, we describe the theory of Kalman filter and state space models. We mention examples of application of Kalman filter and demonstrate the work with econometric software EViews in the field of state space models on this examples. We deal with selected aspects from the portfolio theory. We present the older method of analysis of portfolio which uses the regression model and we draw attention to its essential lack. We deal, in more details, with the method of dynamic analysis of portfolio which is based on the state space models and which removes the lack of the older method. We also study the modification of this method for hedge funds. In the end, we apply the method of dynamic analysis of portfolio on the real data of two Czech investment funds and so we verify the quality of the model.