

This thesis deals with the financial time series model identification. The univariate and multivariate ARMA models and their identification criteria are described. The procedures using the correlation structure of the time series and some information criteria are presented. The functioning of the criteria is verified on simulated time series AR, MA and ARMA. Afterwards, the criteria are compared in terms of reliability and simplicity of use. Finally, there are two examples of univariate and multivariate ARMA model identification for the real financial time series. The data and the R programme source code are enclosed on a CD.