This thesis is devoted to the multivariate canonical ARMA model and then continues with determination of a graphical model. Graphical model includes also relations between contemporaneous variables, not only dependence on past variables. In the practical part of this work canonical AR model is identified using software Mathematica. In this model we specify structural autoregresion according to the graphical models methodology. A time series of exchange rates was processed. It is together with program included on the enclosed CD.