

The presented diploma thesis belongs to the interdisciplinary area called econophysics. In this work we try to model the transition from simple barter trade to commodity money which was the forerunner of today's bank-notes. For the description of such a transition we use microscopic structure of interacting agents which can give rise to measurable macroeconomic quantities. We show that the emergence of commodity money is possible as a result of the cooperative behaviour of individual traders. We observe several statistical features of the process of money emergence and its duration and we modify the model in such a way that it would be as general as possible and allow us to measure other observable quantities. We supplement the computer simulations with analytical approach in which we use the mean field theory and the theory of a representative agent. Using the methods of statistical physics we calculate equilibrium for the case of the homegeneous distribution of commodities in representative agent's portfolio.