

The goal of this master thesis is to set up a model for the count of historical FX options volatility based on numeric simulation of the financial process called dynamic delta hedging in view of delta-neutral portfolio. For empirical calculations there are used high frequency data of the monetary pair EUR/CZK in years 2001–2006 and the Garman-Kohlhagen modification of the Black-Scholes formula for the assessment of monetary option contracts. The whole model is processed by assignment in the Mathematica system. Analytical part deals with the optimization and behaviour of the programmed iteration process on real data, it treats closely its input parameters and points possible difficulties. In the conclusion engaged in the analysis of results there are so acquired volatilities compared with the real, market quoted values.