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INTRA-DAILY FX OPTIMAL PORTFOLIO ALLOCATION

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Abstract

We design and implement optimal foreign exchange portfolio allocations. An optimal allocation maximizes the expected return subject to a Value-at-Risk (VaR) constraint. Based on intradaily data, the optimization procedure is carried out at regular time intervals. For the estimation of the conditional variance from which the VaR is computed, we use univariate and multivariate GARCH models. The result for each model is given by the best intradaily investment recommendations in terms of the optimal weights of the currencies in the risky portfolio.

Keywords: optimal portfolio selection, Value-at-Risk, GARCH models, foreign exchange markets.

JEL Classification: C32, C53, G11.

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