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OPTIMIZING THE HUNGARIAN GOVERNMENT DEBT PORTFOLIO

Abstract:

We construct an optimal debt portfolio model with the purpose of optimizing the Hungarian government debt portfolio. To analyze the characteristics of the costs and corresponding risk factors of the Hungarian debt portfolio we simulate issuances of chosen instruments on a specified time horizon. We apply a multiobjective optimization scheme to construct compositions of financing that minimize the costs and risks of the debt portfolio. Our purpose is to find the set of Pareto-optimal solutions that minimize expected costs, volatility of costs and refinancing risks while maximizing average time to re-fixing. The results of the multiobjective optimization can be used to help in constructing a medium term debt management strategy.

Keywords:

Multiobjective Optimization, Portfolio Optimization, Government Debt Management

JEL Classification: C61, G17, H63