

# Lipschitz continuity of approximate solutions maps to set-valued equilibrium problems

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In this report, we consider parametric set-valued equilibrium problems in normed spaces. Utilizing the Gerstewitz nonlinear scalarization function and relaxed concavity assumptions, we obtain the Lipschitz continuity property of solution maps to such problems. The treatment and obtained results for these problems are new and different from the existing ones in the literature. The main results are applied to the Browder variational inclusion as an application.

**Keywords:** Lipschitz continuity; approximate solution; equilibrium problem; variational inequality; nonlinear scalarization.

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