The Existence and The Stability for Equilibrium Problems
with Lower and Upper Bounds

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Abstract  In this paper, we study a class of equilibrium problems with lower and upper bounds. We
obtain some existence results of equilibrium problems with lower and upper bounds by employing some
classical fixed-point theorems. We investigate the stability of the solution sets for the problems, and
establish sufficient conditions for the upper semicontinuity, lower semicontinuity and continuity of the
solution set mapping $S : \Lambda_1 \times \Lambda_2 \to 2^X$ in a Hausdorff topological vector space, in the case where a set
$K$ and a mapping $f$ are perturbed respectively by parameters $\lambda$ and $\mu$.

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