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## Does Local Monopolistic Approximation Imply a Less Stable Equilibrium?

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**Abstract:** We study an oligopolistic market in which boundedly rational firms compete in quantities adopting either best response or gradient-based decision mechanisms. In particular, we examine the impact of Local Monopolistic Approximation (LMA) on local stability of Cournot equilibrium. It finds that under the best response dynamic with inertia, the LMA increases (decreases) the local stability if the inverse demand function is concave (convex). It is surprising to find the LMA always implies more local stability under the gradient adjustment dynamic.

**Keywords:** local monopolistic approximation; best response dynamic; gradient dynamic; local stability.

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