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**ON STRATEGIC COMPLEMENTARITY CONDITIONS IN  
BERTRAND OLIGOPOLY**

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**Abstract**

For Bertrand duopoly with linear costs, we establish via a single counterexample that: (i) A new monotone transformation of the firms' profit functions may lead to the supermodularity of transformed profits when the standard log and identity transformations both fail, and (ii) Topkis's notion of critical sufficient condition for monotonicity of a Bertrand firm's best-reply correspondence cannot be extended to rely only on positive unit costs.

*JEL Codes:* C72, D43, L13.

**Key words and Phrases:** Price competition, Supermodularity, Single-crossing property, Critical sufficient condition.

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