

Tacit Collusion under Interest Rate Fluctuations  
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Abstract

In contrast to the existing literature on repeated games that assumes a fixed discount factor, I study an environment in which it is more realistic to assume a fluctuating discount factor. In a repeated oligopoly, as the interest rate changes, so too does the degree to which firms discount the future. I characterize the optimal tacit collusion equilibrium when the discount factor changes over time, under both price and quantity competition, and I show that collusive prices and profits depend not only on the level of the discount factor but also on its volatility. Collusive prices and profits increase with a higher discount factor level, but decrease with its volatility. These results have important implications not only for the study of cooperation in repeated games but also for empirical studies of collusive pricing and the role that collusive pricing may play in economic cycles.

**Keywords:** tacit collusion, interest rate, random discount factor, repeated games.

**JEL Classification:** C7, D43, L13.