

## Collusion with and without entry threats

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### ABSTRACT

We define the in-and-out strategy, which sustain cartel profits as a subgame perfect equilibrium for a wide interval of discount factors, for a large class of repeated Cournot oligopoly models with perfect monitoring. In this strategy, the nondeviating firms forgive the deviating firm and all together they revert to collusive behavior after the deviator repents and pays a punishment in several periods. During the repentance phase, each punisher's output is the Cournot output when the game is played by  $n-1$  players.

We also study the threats of potential entrants, which decide whether or not to enter the industry. A decision to enter incurs a cost and allows the firm to begin production in the following period. When the discount factor is sufficiently high, then we can fix endogenously the number of active firms and show that the cartel profits can be sustained as a free-entry equilibrium by the in-and-out strategy.