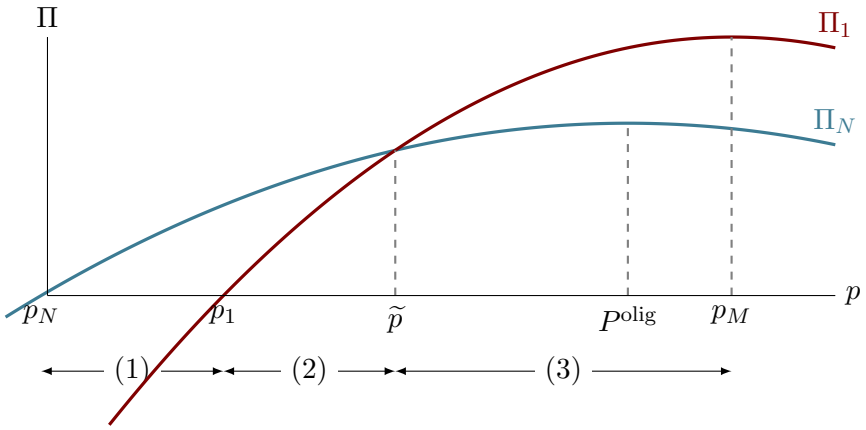
Solution 1. N firms compete in prices in a market with demand $D(p)$. Each firm i has a cost function $C(q_i)$, con $C''(q_i) > 0$, $\quad i = 1, \cdots, N$. Is there an equilibrium in which the resulting market price would be as if firms where price takers?

Let Π_1 and Π_N be the monopoly and oligopoly benefits, respectively. If there exists $\widetilde{p} \in [p_1, p_N]$ there is a continuum of equilibria.



- For prices in the interval (1), oligopoly profits are positive, but monopoly profits are negative.
- For prices in the interval (2), both monopoly and oligopoly profits are positive, but monopoly profits are smaller in comparison. There are no incentives to deviate.
- For prices in the interval (3), both monopoly and oligopoly profits are positive, but monopoly profits are higher in comparison. There are incentives to deviate by doing *undercutting*.