

# The Welfare Effects of Oligopolistic Third-Degree Price Discrimination when Own and Cross Price Elasticities Are Constants\*

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## Abstract

This study examines the welfare effects of oligopolistic third-degree price discrimination with constant own and cross price elasticities of demand under product differentiation. We verify the robustness of Adachi and Matsushima's (2014) finding on social welfare under linear demand, that price discrimination is more likely to improve social welfare for a higher value of cross price elasticity in a "strong" market (where the discriminatory price is higher than the uniform price). In contrast to Aguirre and Cowan's (2015) results for a monopoly, social welfare can be higher with price discrimination even if the relative share of the strong market under uniform pricing or the own elasticity difference between the two markets is sufficiently small. Consumer surplus can also be higher with price discrimination if the cross price elasticities are sufficiently low. This suggests that Adachi and Matsushima's (2014) result on consumer surplus (price discrimination never improves social welfare) hinges on the assumption of linearity.

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