

Third-Degree Price Discrimination, Quality Choice, and Welfare: The Monopoly Case

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Abstract

As already shown by Schmalensee (1981) and others, an increase in total output is a necessary condition for third-degree price discrimination to improve social welfare. Employing an endogenous quality choice model (Mussa and Rosen, 1978), we reconsider the effect on social welfare of monopolistic third-degree price discrimination in a vertically differentiated product market. We first show that the arguments in Schmalensee (1981) and others hold when the quality level of the product is exogenously given. However, we also prove that price discrimination always enhances social welfare when a monopolist endogenously chooses the quality level of the product, even though total output does not increase. This is mainly because the quality improvement owing to price discrimination significantly increases consumer surplus and thus improves social welfare. Moreover, we show that third-degree price discrimination can be Pareto improving when preference differences between markets are sufficiently large.

Keywords: Third-degree price discrimination; Endogenous quality choice; Vertically differentiated products; Monopoly

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