

Why Mixed Qualities May Not Survive at Equilibrium: The Case of Vertical Product Differentiation*

Georgi Burlakov
CERGE-EI[†]
georgi.burlakov@cerge-ei.cz

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Abstract

In the classical literature on vertical differentiation, goods are assumed to be single products each offered by a different firm and consumed separately one from another. This paper departs from the standard setup and explores the price competition in a vertically differentiated market where a firm's product is consumed not separately but in fixed one-to-one ratio with another complementary type of good supplied by a different producer. An optimal solution for market setting with two entrants of a type is proposed, to show that there could be an equilibrium at which the so-called "mixed-quality combinations", consisting of one high-quality good and one low-quality good each, remain unsold. For such an equilibrium to exist, it is sufficient the mixed-quality combinations to be at least as differentiated from the best as from the worst combination which retains its positive market share. Thus, the mixed-quality exclusionary outcome appears as a further form in which the well-known maximum-differentiation principle could be implemented in a multi-market setting. It provides a new explanation of the self-selection bias in consumption observed in some industries for complementary goods.

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