Estimating the Degree of Vertical Integration: An Empirical Analysis of the U.S. Carbonated Soft Drink Industry

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Abstract

Industrial economists and competition policymakers have traditionally assumed vertical integration is smoothly achieved, raising involved parties's joint profits. However, it may result in *incomplete* vertical integration as the process involves organizational conflicts. This paper estimates such a degree of vertical integration, comparing the two vertical mergers that happened in the U.S. carbonated soft drink industry in 2010. I first conduct a difference-in-differences (DID) analysis of the price effects of vertical integration to find that one vertical merger is consistent with the well-known story of "elimination of double marginalization," whereas the other vertical merger is not. I then estimate a structural model of upstream and downstream bargaining. My estimation results show that the while the former vertical merger is almost complete, the latter merger was not only incomplete but made the internal process *worse*, suggesting the possibility of an organizational failure.

Keywords: Vertical Integration; Wholesale Bargaining.

JEL Classification: L13; L49; L66.

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