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BUNDLING BY COMPETITORS AND THE SHARING OF PROFITS

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Abstract

We discuss the welfare effects of bundling two products offered by two symmetric firms. We first show that, in terms of welfare, a monopoly does better than a duopoly in which each firm sell its good and that a monopoly selling the bundle does better than if it sells the bundle and the two goods separately. We also show that the choice of the mechanism for sharing the profits, obtained from the sales of the bundle, might have dramatic positive or negative effects – even when the various optional mechanisms yield equal splits. In particular, the use of the Shapley value yields the highest total and consumer surpluses and the lowest producer surplus, while the weighted Shapley value totally reverses the outcome and yields profits which are very close (over 99%) to the full monopoly profits. Hence, as in the case of bundling by a monopolist, when competitors bundle they assist each other in deterring entry. However, in addition when competitors bundle, they can implicitly cooperate via the setting of the profit sharing rule and increase their profits at the expense of customers. This issue calls for some further attention by regulators.

Keywords: Bundling, Shapley value, weighted Shapley value, sharing of profits.

JEL Classification: L13, L51.

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