Editor's report on '*On Merger Profitability and the Intensity of Rivalry*', by
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After having carefully read the paper, the various comments and reports, as well as the responses of the author, I have the regret to conclude that the current version of the paper does not warrant publication as a journal article in *Economics: The Open-Access, Open-Assessment E-Journal.* As my criticisms to the approach followed by the author are rather profound (see below), I do not see how the paper could be revised in a satisfactory manner. However, given the quality of the discussion that the paper has triggered, I believe that the paper should stay as a discussion paper on the website of the journal.

Let me now explain my view of the paper. By merging, firms internalize their former rivalry. Everything else equal (in particular, absent cost synergies), this leads the merging firms (hereafter, the 'insiders') to produce lower quantities and/or to set higher prices. To assess the profitability of a merger for the insiders, one needs to factor in the reaction of the other firms in the industry (hereafter, the 'outsiders'). This reaction decreases (resp. increases) the profitability of the merger if competition on the product market involves strategic substitutes (resp. complements). In the present analysis, firms set quantities of a homogeneous products; this means that strategies are substitutes and that the reaction of the outsiders reduces the profitability of the merger. The intuition is the following: anticipating that insiders will produce a lower quantity, outsiders react by increasing their total quantity, which reduces the market price and, thereby, the profitability of the merger. As correctly stressed by the first reader (September 03, 2015), the note provides a way to parametrize somehow the degree of strategic substitutability and, thereby, to quantify the negative impact of the other firms' reaction on merger profitability.

However, I am not convinced by the way this parametrization is built and, even less, interpreted. If one reads the results of the paper at the light of the previous intuition (which is the correct one), one would have to conclude that the most detrimental reaction of the outsiders is reached in the situation that reproduces full collusion ($\lambda = 1 - n$).[1] In other words, the competitive reaction to the merger would be the strongest... *in the absence of competition.* This simply does not make sense. I therefore share the opinion of another reader (September 25, 2015), who writes that "the use of the 'coefficient of cooperation' is not appropriate for the analysis of merger profitability."

I believe that the main flaw of the analysis is to consider the degree of competitiveness of the industry as an exogenous variable. The competitiveness in

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[1]The technical application of the model shows that the ratio (in absolute value) between the variation of the quantity of an outsider and the variation of the quantity of the insiders decreases with λ and is thus maximized at $\lambda = 1 - n$:

$$\left| \frac{\Delta q_{outsider}}{\Delta q_{insiders}} \right| = \frac{1}{2} \left(1 - \frac{\lambda}{n-1} \right).$$

Moreover, the limiting case of collusion ($\lambda = 1 - n$) is somehow degenerate as the firms' 'reaction functions' all coincide, resulting in an infinite set of 'Nash equilibria'.

an industry is jointly determined by a number of factors. At the exception of the nature of competition (price or quantity) and, to some extent, the form of the demand, these factors are endogenous: the number of active firms depends on entry, exit, mergers, divestures, ...; product positioning and advertising strategies determine product differentiation and, thereby, the intensity of competition; the previous factors affect the sustainability of tacit collusion and the profitability of cartels; etc. The current paper (as well as other papers that the author quotes) seems to reverse the causality and/or to omit missing explanatory variables: it is not that "horizontal mergers are more likely to be profitable in a more competitive market structure", as the author writes; what is more correct is that "mergers usually foster collusion", as written by another reader (September 16, 2015) or that quantity competition, compared to price competition, makes horizontal mergers less likely and tacit collusion less sustainable, as shown in IO textbooks.