This study contributes to the literature of port privatization study by identifying the optimal private level of partial public port in the presence of horizontal and vertical differentiation between the two public and private ports for the first time. The paper is coherently organized and the proposed propositions are elaborated thoroughly. I only have a few comments:

1. Even though the characterization of "partial public port" has been proposed and considered in literature for years, doubts remain about its objective in real port operations. On page 3 line 7, there is: "a partial public one is to maximize a combined goal of public and private objective" Could you elaborate more about this objective in reality?

2. On page 3 line 7, there is:"Cui and Notteboom (2017) is notable for showing the partial privatization of the public port is social desirable in different port competition and cooperation settings." It would be appreciated that the authors could also consider the port cooperation setting in this study.