

[Working Paper No. 886](#)

Keep in mind

La serie Borradores de Economía es una publicación de la Subgerencia de Estudios Económicos del Banco de la República. Los trabajos son de carácter provisional, las opiniones y posibles errores son responsabilidad exclusiva del autor y sus contenidos no comprometen al Banco de la República ni a su Junta Directiva.

Autor o Editor

Jorge Balat

Juan E. Carranza

Juan D. Martin

In this paper we formulate a dynamic multi-unit auction model to characterize bidding behavior in hydro power dominated electricity markets. Our model implies that, in order to maximize expected profits, hydro producers will submit bid prices above its marginal production costs that account for the intertemporal opportunity cost of water and the expected strategic effects of bids on rivals' behavior. We test the predictions of our model against data of the Colombian electricity market, where hydro producers hold 63% of total installed capacity, and find evidence consistent with both dynamic and strategic behavior.

The opinions expressed here do not necessarily correspond neither to the Banco de la República nor its Board of Directors.