Banco de la República | Colombia
Somos el banco central de Colombia

Working papers economics - Minimum Markup Laws and Multiproduct Pricing

Download Keep in mind
The series Working Papers on Economics is published by the Office for Economic Studies at the *Banco de la República* (Central Bank of *Colombia*). It contributes to the dissemination and promotion of the work by researchers from the institution. This series is indexed at Research Papers in Economics (RePEc).

On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. The works published are provisional, and their authors are fully responsible for the opinions expressed in them, as well as for possible mistakes. The opinions expressed herein are those of the authors and do not necessarily reflect the views of Banco de la República or its Board of Directors.

AUTHORS AND/OR EDITORS Herrera-Araujo, Daniel Flórez-Acosta, Jorge
Cross-subsidization is not merely a redistributive strategy, but a central mechanism that favors demand and generates substantial gains for both consumers and retailers, and regulations that restrict this mechanism may have unintended effects on welfare.

Publication Date: Wednesday, 1 of July 2026 **Approach**
This paper examines how minimum markup laws affect price-setting in multi-product retailing, where supermarkets jointly set prices across their product assortment and typically set low prices on certain items to attract consumers while recouping margins on others. Such laws exist in many countries around the world, including Colombia, the United States, France, and the United Kingdom, and are generally intended to prevent large retailers from selling products below cost and drive smaller competitors out of the market.

This study exploits the temporary suspension of the minimum markup law in the state of Wisconsin, United States, between February 2009 and September 2010, to analyze the economic effects of these regulations. To this end, we use household- and store-level Nielsen scanner data for the period 2007–2011, which allow us to quantify the general equilibrium effects of the regulation on the prices of affected and unaffected products, demand, and overall welfare.

Contribution
The paper makes two main contributions. First, it provides the first empirical evidence on the equilibrium effects of minimum markup laws in multiproduct retailing, showing that these regulations generate spillover effects on the prices of the entire basket of products and providing new evidence on the role of cross-subsidization across products as a central feature of competition among supermarkets. Second, we develop a bias correction that allows for consistent estimation of multiproduct demand when the set of alternatives considered by the researcher is not exhaustive—a widespread issue in this type of models.

Results
Reduced-form evidence shows that the suspension of the law lowered milk prices while simultaneously increasing cereal prices, consistent with a reallocation of margins across products by retailers. Counterfactual exercises based on the structural model indicate that a 5% minimum margin increases average prices, reduces market shares by between 2% and 7%, and decreases consumer surplus by 3.2%, while increasing retailers' profits.

Eliminating cross-subsidization across products altogether has much larger effects: prices rise by approximately 32%, market shares fall by between 75% and 82%, and total welfare declines by 44%. These findings indicate that cross-subsidization is not merely a redistributive strategy, but a central mechanism that favors demand and generates substantial gains for both consumers and retailers, and that regulations restricting this mechanism may have unintended effects on welfare.

Fuente: https://www.banrep.gov.co/en/publications-research/working-papers-economics/minimum-markup-laws-multiproduct