

# Borradores de Economía - Carbon tax pass-through: Incidence with vertical integration and price regulation

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Publication Date: Friday, 27 of December 2024 **Abstract**

The impact of carbon taxes on consumer welfare and emissions in the transportation sector is influenced by both regulatory and market dynamics. As the sources of climate emissions from transportation evolve, how will this impact change in the future? Utilizing extensive data from retail fuel stations and wholesalers in Colombia, we estimate the factors affecting the pass-through of a carbon tax on gasoline prices. Our findings reveal that the pass-through to Colombian consumers is significant, often exceeding one. This phenomenon of "overshifting" vanishes when markets are regulated or when gas stations are vertically integrated with wholesalers. These results indicate that as the global use of carbon taxes to address climate externalities from automobile use increases, the welfare loss for consumers may be greater than what current literature, often focused on the United States, suggests.

**The results are relevant for future discussions on climate policies, as they indicate that carbon taxes will be effective but probably more regressive than previously thought.**