
[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*). 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.

AUTHOR OR EDITOR

Rincón-Torres, Andrey Duván

Rojas-Silva, Kimberly

Julio-Román, Juan Manuel

The series [Borradores de Economía \(Working Papers on Economics\)](#) contributes to the dissemination and promotion of the work by researchers from the institution. On multiple occasions, these works have been the result of collaborative work with individuals from other national or international institutions. This series is indexed at Research Papers in Economics (RePEc). The opinions contained in this document

are the sole responsibility of the author and do not commit Banco de la República or its Board of Directors.

Publication Date:

Monday, 13 September 2021

Abstract

We study the interdependence of FX and Treasury Bonds (TES) markets in Colombia. To do this, we estimate a heteroskedasticity identified VAR model on the returns of the COP/USD exchange rate (TRM) and bond prices, as well as event-analysis models for return volatilities, number of quotes, quote volume, and bid/ask spreads. The data under analysis consists of 5-minute intraday bid/ask US dollar prices and bond quotes, for an assortment of bond species. For these species we also have the number of bid/ask quotes as well as their volume. We found, also, that the exchange rate conveys information to the TES market, but the opposite does not completely hold: A one percent COP depreciation leads to a persistent reduction of TES prices between 0.05% and 0.22%. However, a 1% TES price increase has a very small effect and not entirely significant on the exchange rate, i.e. a COP appreciation between 0.001% and 0.009%. Furthermore, TRM return volatility increases do not affect bond return volatility but its liquidity, i.e. the bid/ask quote number and volume. These results are coherent with the fact that the FX market more efficiently reflects the effect of shocks than the TES market, which may be due to its low liquidity and concentration on a specific habitat. These results have implications for the design of financial stability policies as well as for private portfolio design, rebalancing and hedging.