The Interdependence of FX and Treasury Bonds Markets: The Case of Colombia

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Publication Date: Monday, 13 of 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.

Fuente: https://www.banrep.gov.co/en/interdependence-fx-and-treasury-bonds-markets-case-colombia