<u>Download</u> <u>Other Working Papers</u> 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 Ricardo Mariño-Martínez Carlos León Carlos Cadena-Silva

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)

Fecha de publicación Tuesday the 4th of February, 2020

> 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.

## Abstract

A central counterparty (CCP) interposes itself between buyers and sellers of financial contracts to extinguish their bilateral exposures and -thus- to reduce counterparty risk. Therefore, this interposition should affect the way market participants engage in financial markets. Based on transactional data corresponding to the Colombian Peso non-delivery forward market and network analysis basics, this article compares transactions agreed to be cleared and settled by Cámara de Riesgo Central de Contraparte de Colombia (CRCC, the sole CCP in Colombia) with those to be cleared and settled bilaterally. The effect corresponds to what is expected. Networks of transactions to be cleared and settled by CRCC show significantly higher connectivity (i.e. higher density, reciprocity and transitivity), along with a lower distance among participating financial institutions. This suggests that agreeing on clearing and settlement by CRCC reduces liquidity risk. With the interposition of CRCC the resulting exposures networks show lower connectivity and higher distances, which concurs with counterparty risk mitigation. Differences in the structure of networks are significant. Results are important as they enable to visualize and quantify the effect of clearing and settlement by CRCC in risk management.