Bargaining Power in Firm-to-Firm Relationships - Two Methodologies to Detect Outliers in the Census Trade Data

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CES Technical Notes

CES-TN-2017-03

This note develops two methodologies to detect possibly incorrectly reported shipment values and quantities in the Longitudinal Foreign Trade Transactions Database (LFTTD). Both approaches seek to identify outliers in terms of unit values, defined as the ratio of value and quantity shipped. The first methodology examines trades in the far tails of the cross-sectional unit value distribution across importers or exporters, and highlights those trades that appear incompatible with a given U.S. firm's own transactions. The second approach identifies outliers as cases where a unit value jumps by an order of magnitude compared to a U.S. firm's transactions over the past two years. While both approaches reveal that outliers are relatively rare, the note highlights several cases where outliers were very large and possibly affected trade statistics. The note further presents distributions of outliers by value and discusses the countries and products that exhibit the largest shares of outliers. It also presents a number of examples to showcase that outliers identified by the two methodologies appear suspicious also to a human looking at the data. The note concludes with a discussion of the advantages and the disadvantages of the two approaches. The code files referenced in this file are available to Census employees and will hopefully be of use going forward.

Relevant Datasets: LFTTD, LBD

Required Dataset Permissions: LFTTD 1992-2002

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