# Anti-Comparative Advantage: A Puzzle in U.S.-China Bilateral Trade

## Jiandong Ju

Shanghai University of Finance and Economics
Tsinghua University
Hong Kong Institute for Monetary Research

and

#### Ziru Wei

Tsinghua University

and

### Hong Ma

Tsinghua University

April 2015

## **Summary**

From 1992 to 2011, total trade volume between the U.S. and China increased by 25 times, and China's share in U.S. total imports increased from 5% to 20%. However, the U.S.'s share in China's total imports dropped from 11% to 8% over the same period. In major U.S. exports to China, Waste & Scrap increased from 744 million dollars in 2000 to 7,562 million dollars in 2008, rising by 916% and becoming the No.1 product that the U.S exports to China. It is important to understand what explains these structural changes, and especially whether comparative advantage determines the structure of U.S.-China bilateral trade.

This paper find an "Anti-Comparative Advantage" puzzle: the U.S. exports less to China in sectors where it has greater comparative advantage, while as predicted by the theory China exports more to the U.S. in its sectors with greater comparative advantage. To further study this issue, we extend the Eaton-Kortum model to multiple sectors in bilateral trade and empirically test the theory of comparative advantage. We find that after controlling for the importer's demand, trade costs and factor intensities, etc., the puzzle in the pattern of US exports to China still exists.