How did Chinese yuan appreciation affect export diversification?

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Miaojie Yu (2012): “In 2005, China abated its fixed exchange rate against the U.S. dollar and began to appreciate Chinese yuan (RMB).”

http://www.xe.com/currencycharts/?from=USD&to=CNY&view=10Y
Miaojie Yu(2012): “In this paper, I investigate the effect of the RMB appreciation on imports to the United States from China using industrial panel data from 2002 to 2008. In contrast to other pure reduced-form estimations, my estimations are guided by an augmented theoretical gravity model. Structural parameters based on a theoretical framework will help us to understand the magnitude of RMB revaluation on Sino-U.S. bilateral trade. The estimation results clearly suggest that the RMB appreciation against the dollar significantly reduced imports to the United States from China.”
Thorbecke and Smith (2010): “The results indicate that the RMB exchange rate matters more for China’s ordinary exports than for China’s processed exports. A 10% unilateral appreciation of the RMB against the countries purchasing final exports would reduce ordinary exports by almost 12% and processed exports by 4%.”

“Ordinary exports tend to be simple, labor-intensive goods while processed exports tend to be sophisticated, high-tech goods. A reduction in ordinary exports from China would be replaced by an increase in labor-intensive exports from other countries on lower rungs of the ladder of comparative advantage. A reduction in processed exports, on the other hand, would switch expenditures towards US and European goods. Thus, currency appreciations throughout East Asia are required to reduce China’s massive surpluses with the US and Europe and rebalance world trade.”
Literature Review—Chinese export performance
Samen(2010)“When export is concentrated in a few primary commodities, there can be serious economic and political risks. Export diversification aims at mitigating these economic and political risks.”

“Another objective of diversification is to reduce dependence upon one or a limited number of geographical destinations for its exports. Diversification can also aim at expanding opportunities for export and improvement of backward and forward linkages to domestic inputs and services.

Heavy dependence on a small number of primary commodity products exposes a country to the negative effects of unfavorable characteristics of world demand and negative supply side features of these primary products.”
Samen(2010) pointed out that “there are various ways to measure export diversification. In the literature, the choice of a measure usually corresponds to different definitions, dimensions, forms, and levels of diversification. The most commonly used measure of diversification is the Concentration Ratio (product or geographic concentration). Other measures used are: the Commodity-Specific Cumulative Export Experience Function (CSCEEF), the Absolute Deviation of the Country Commodity Shares, the Commodity Specific Traditionalist Index (CSTI), and the Variance of the CSTI.”
Samen(2010): “The Concentration Ratio. Several measures have been developed to estimate concentration ratios (Attaran, M and Zwick, M, 1987; ECA, 2006). These include: the Hirschman index, the Ogive index, the Entropy Index, the Herfindahl Index, the Aggregate Specialization Index. These measures are conceptually quite similar, and their approaches, which compare actual distributions to a hypothetical uniform distribution, have been proven to provide quite comparable ranking.”

“The Hirschman Index is the most widely used measure of trade and commodity concentration. It is the index that would result if a country’s export receipts were divided evenly among different commodities. It may be written as follows:

\[ H_1 = \sqrt{\sum_{i=1}^{n} \left(\frac{x_i}{X}\right)^2} \]

Where \( x_i \) is the export value of a specific commodity \( i \), \( X \) the country’s total export. A higher \( H_1 \) indicates greater concentration of exports on a few commodities.”
Research proposal

Summary
I’d like to collect data of Chinese exchange rate and export performance through 2005 to 2015, and use some statistical methods like multiple regression to find the relationship of the two variables. The research will hopefully last for a whole fall 2015 semester and I really want to make it as my independent research topic.
Thanks!

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