Introduction & Background

As the second largest and the fastest-growing economy in the 21st century, China is the major engine of global economic development. Yet its economic growth has slowed down significantly since the global financial crisis in 2008. The potential of a "hard-landing" and whether China could avoid it concern every country involved in the interconnected global economy.

I seek to predict China’s future growth using its changing export structure. This project classifies China’s export products into different categories, and emphasis is added onto the analysis of technology intensive division. If China’s slow down is compensated by technology advancement, then we may assume China could accomplish its economic transition and avoid the hard-landing. However, the results show no outstanding development of high technology intensive industry, thus a hard-landing is more likely.

Guiding Questions

- How to build the model of China’s export structure?
- How did the export structure change over the past several years?
  (especially the technology-intensive group)
- What do the changes imply about China’s future growth?

Building the Export Structure

China’s Total Exports

Empirical Trade Analysis (ETA)

Empirical Trade Analysis (ETA) is the widely accepted classification code for tradeable goods, based on United Nations Statistics Division’s Standard International Trade Classification (SITC). I applied ETA code to China’s export catalogue, and classified China’s exports into the listed five categories.

Results

Annual Growth Rate by Years

When we look at annual growth data, although the annual growth rate varies by groups, there is hardly any evidence of a consistent boom in technology-intensive group. In particular, technology-intensive group grew no faster than average after 2011.

In addition, we also find that the growth in technology-intensive products export has been accompanied by currency depreciation. Therefore even less growth in group D exports could be attributed to technology advancement.

Implications

- There is no significant change in China’s export structure over the post-financial crisis period.
- Technology-intensive group of exports developed no sooner than other groups, especially after 2011.
- The growth of technology-intensive products may not be the result of technology advancement.
- China’s slow down is not mainly caused by creative destruction, so a hard-landing is likely.

Reference


Acknowledgement

Professor Olivier Jeanne & Dr. Robert Barbera
Woodrow Wilson Undergraduate Research Fellowship, especially Ani Cox and Dr. Steven David