

#### Disclaimer

The views expressed in this publication are those of the authors and do not necessarily reflect the views and policies of the Asian Development Bank (ADB) or its Board of Governors or the governments they represent. ADB does not guarantee the accuracy of the data included in this publication and accepts no responsibility for any consequence of their use. The mention of specific companies or products of manufacturers does not imply that they are endorsed or recommended by ADB in preference to others of a similar nature that are not mentioned. By making any designation of or reference to a particular territory or geographic area, or by using the term “country” in this document, ADB does not intend to make any judgments as to the legal or other status of any territory or area.

## Comments on:

# “The People’s Republic of China’s Evolving Role in Global Production and Supply Networks

A Value Chain Analysis Using Multi-Regional Input-Output Tables”

Quanrun CHEN

University of International Business and Economics,  
Beijing, China

qchen@uibe.edu.cn

## Use state-of-the-art tools for global value chain studies:

- ✓ Multi-regional input-output tables
- ✓ The ADB multi-regional input-output tables

Cover more Asian economies than WIOD

Very helpful for studies on Asian economies

An important development for WIOD: WIOD+

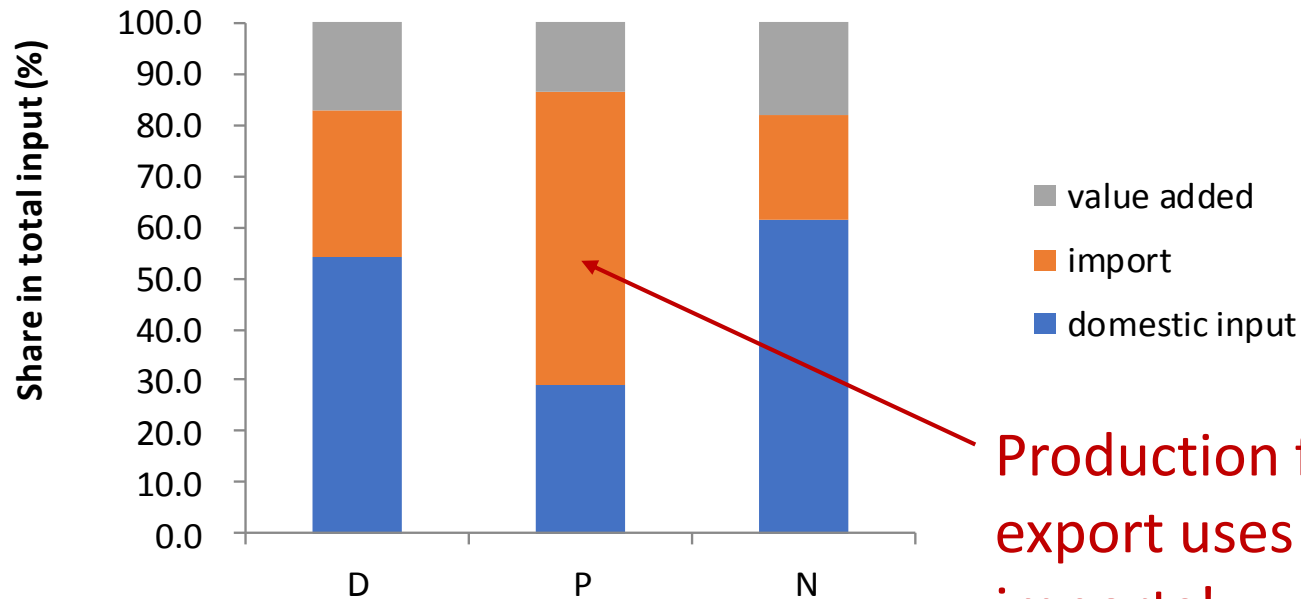
## Use multiple indicators to reveal China's roles in global value chains

- ✓ Value added exports
- ✓ Backward and forward linkages
- ✓ New Revealed Comparative Advantage
- ✓ ...

# Potential Improvement(1)

Production heterogeneity for exporters and non-exporters  
(especially for processing exporters)

The input structure of electronic equipment sector



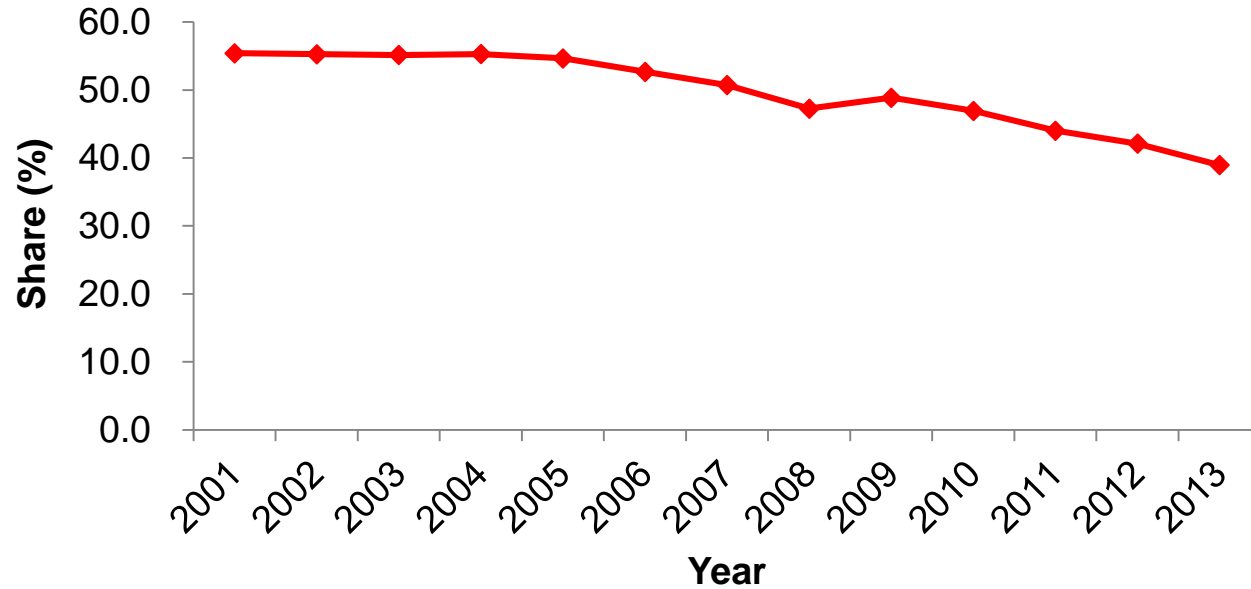
Production for processing export uses much more imports!

# Potential Improvement(1)

Types of final demand	Domestic value added per \$1000 final demand (China, 2007)
Final demand of domestic products	897
Processing exports	367
Non-processing exports	780
Exports	591

# Potential Improvement(1)

**The share of processing trade in China's total export of goods**



# Potential Improvement(1)

- ✓ China's Undistinguished processing trade in the input-output tables would lead to biased results!
- ✓ Studies have shown that China's value added exports would be overestimated by 15%, if China's processing trade is hidden in the world input-output tables.

Distinguishing production for processing exports for countries with high share of processing exports in the ADB multi-regional input-output tables?

# Potential Improvement(2)

Jobs

Decent jobs!

Occupational health and safety!



## Potential Improvement(2)

“Do Asian Countries Upgrade in Global Value Chains? A New Approach and Empirical Evidence”

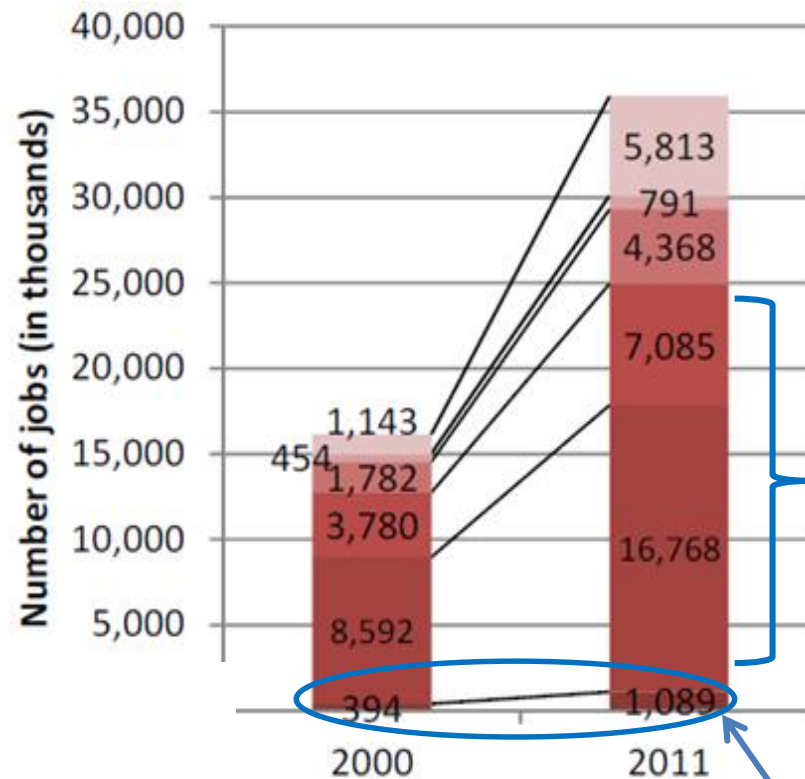
*Joint work with Gaaitzen de Viries, Rana Hasan and Zhigang Li*

Data

- ✓ ADB multi-regional input-output tables (Mariasingham, 2015)
- ✓ Industry-Occupation specific employment data

# Potential Improvement(2)

Example:  
GVC jobs in  
Chinese Electronics



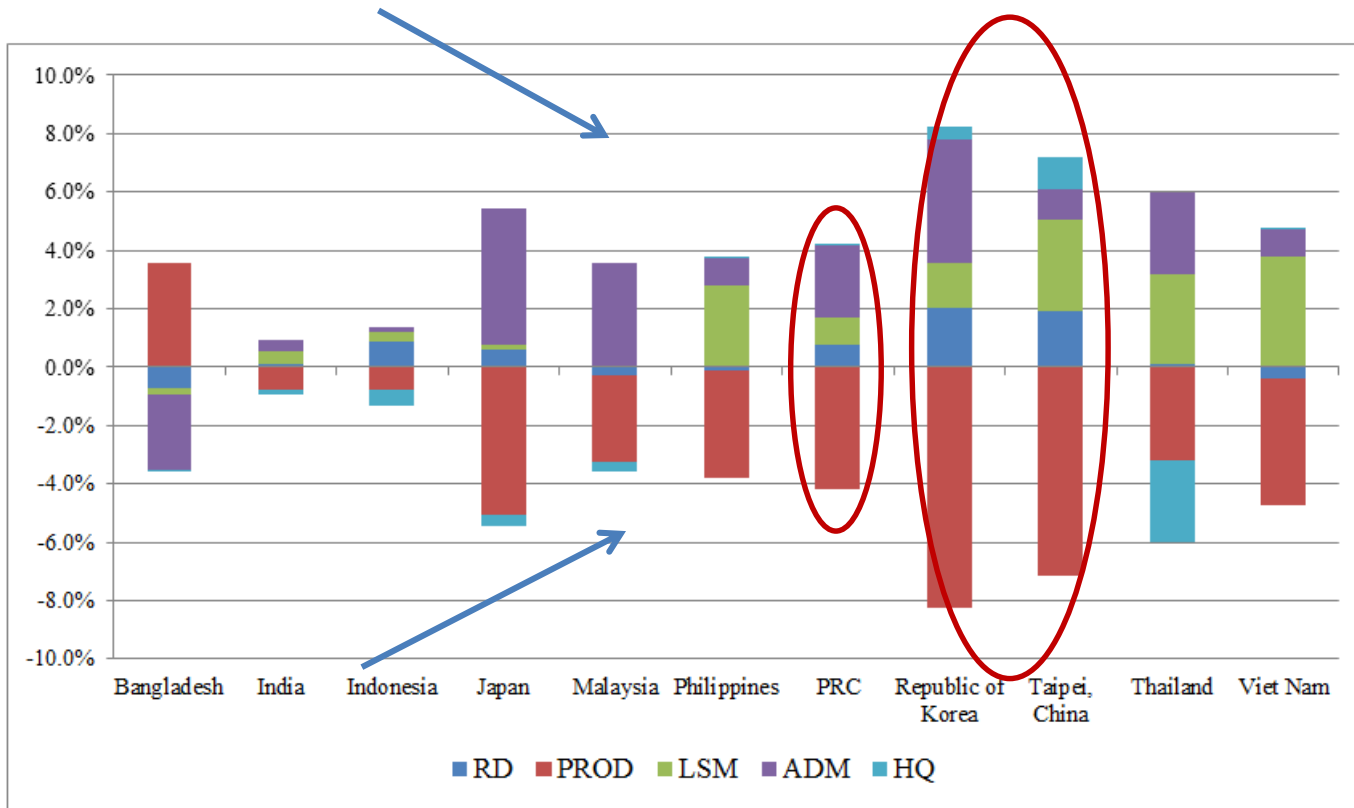
- Foreign workers
- PRC, headquarter workers
- PRC, administration and back-office workers
- PRC, logistics, sales and marketing workers
- PRC, Production workers
- PRC, R&D workers

Still specialized in  
production and back-  
office activities

Rapid growth in R&D  
workers, almost tripled

# Potential Improvement(2)

Changes in employment shares of GVC workers by activity (2000-2011)



The shares of production workers decreased

The shares of R&D workers, logistics, sales and marketing workers increased

- ✓ Upgrading process is ongoing across Asia
- ✓ But at different speed. High-income countries are faster than developing countries

Thank you for your attention!

[qchen@uibe.edu.cn](mailto:qchen@uibe.edu.cn)