

# GVC related initiatives at ADB

GVC Measurement for Sustainable  
Development  
UNSC Side Event  
March 7, 2016

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# Outline

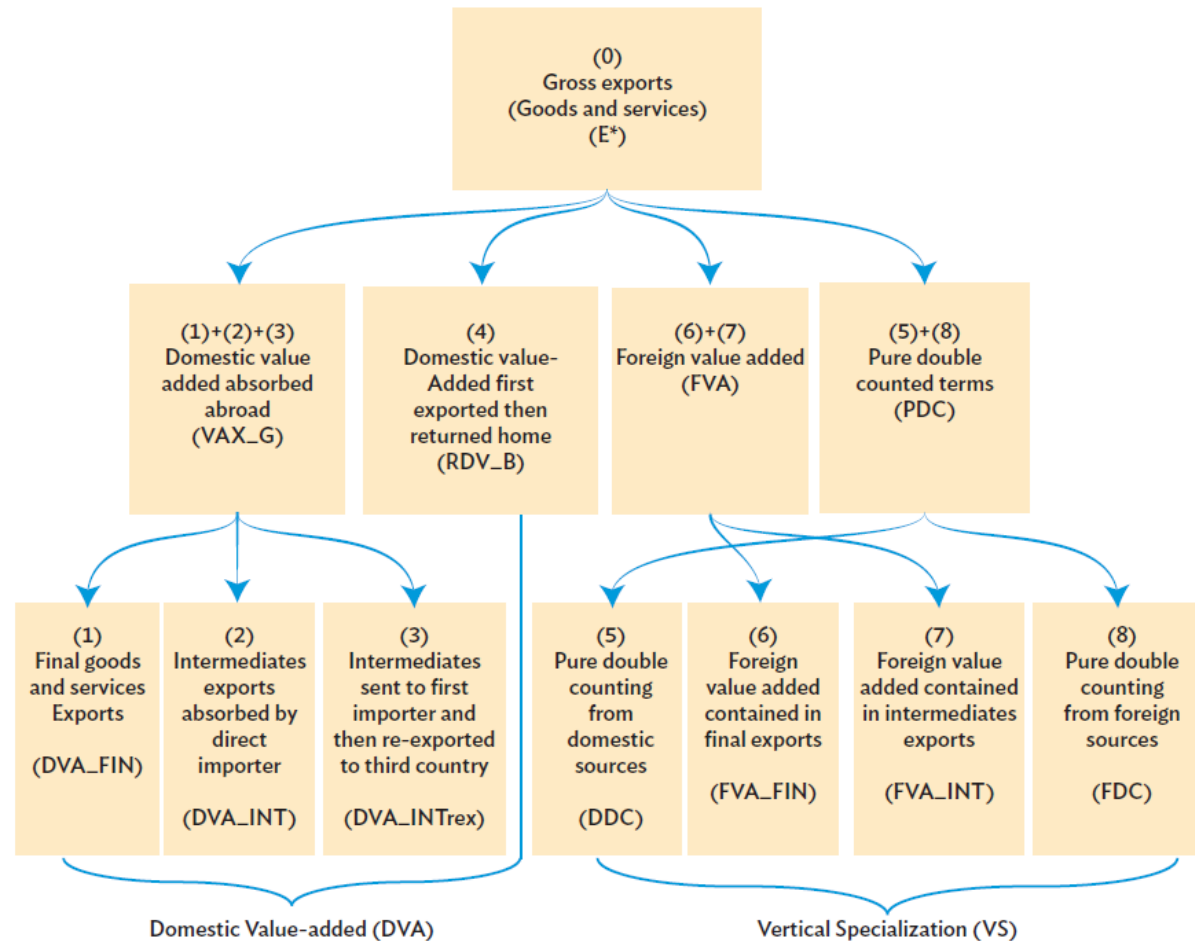
- ▶ GVC data development
- ▶ Policy issues
- ▶ Related statistical projects

# 1. GVC Data Development

- Expanding the World Input–Output Database (WIOD) to include more Asian economies
  - Added in 2015: Bangladesh, Malaysia, Philippines, Thailand and Viet Nam
  - Target for 2016: Hong Kong, China; Kazakhstan; Mongolia; Singapore and Sri Lanka
  - Expanded WIOD produced for reference years 2000, 2005–2008 and 2011
  - Currently working on expanding WIOD for 2009, 2010 and 2012–2015
  - Current and Constant price International IOTs will be produced
- Constructing a time–series of Asia focused International Input–Output Tables
  - Two integrated projects underway at ADB to produce international IOTs encompassing all Asian economies annually

- Developing a database to disseminate GVC related statistics produced through the application of advanced methods. The database includes
  - Country–sector specific exports decomposed into country–sector specific value added terms
  - Country–sector specific indicators of GVC participation
  - Real Effective Exchange Rates (REER)
  - Other GVC related statistics (such as the effect on employment, income and environment)
  
- Our International IOT and GVC related outputs can be found currently at:  
<http://www.adb.org/ki-2015>  
[http://www.wiod.org/new\\_site/otherdb.htm](http://www.wiod.org/new_site/otherdb.htm)

# Conceptual Framework for Data



The phenomenon of international production sharing is studied through decomposing traded goods and services into origin based components.

# Example: Transport Equipment Supply Chain using GVC Measures



Value of Car- Total gross exports

Breakdown:

a. Direct VAX\_G- assembly costs, labor

b. Indirect VAX\_G:

1. Engine, electrical and lighting components from Medium to High Tech Industries
2. Ball bearings, tires, seats from Low Tech Industries
3. Exporting Finance and Shipping Logistics from Business Services

c. FVA and FDC - imported parts

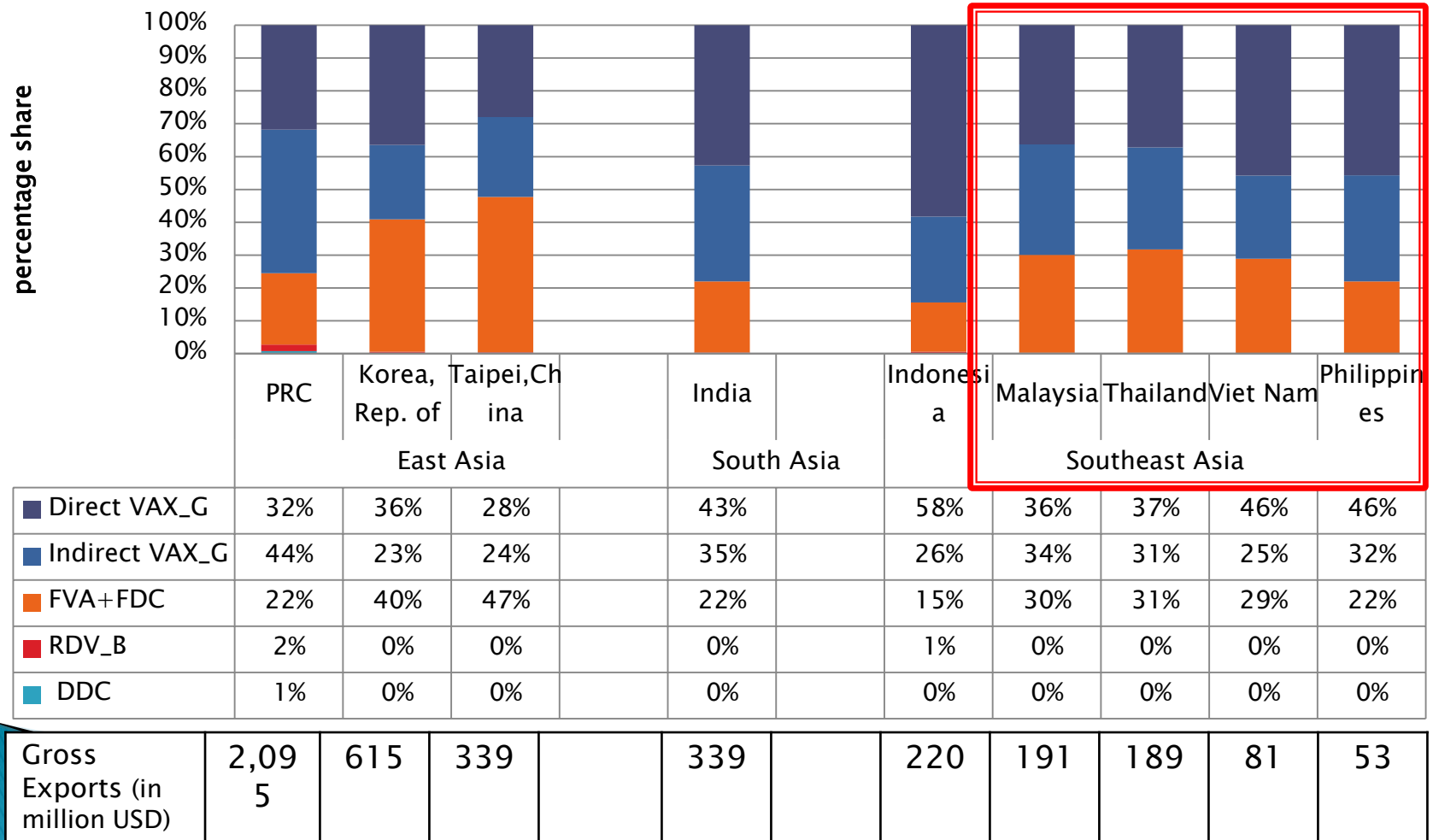
d. RDV\_B and DDC- domestically-manufactured computer chips exported to third party abroad for further processing then shipped back for final assembly

## 2. Policy Issues

- ▶ Some policy relevant issues we are currently looking at
  - GVC participation across Asia
  - The importance of indirect exports
  - Labor market implications of GVC participation

# GVC Participation in Asia

## Composition of Gross Exports in Asia, 2011

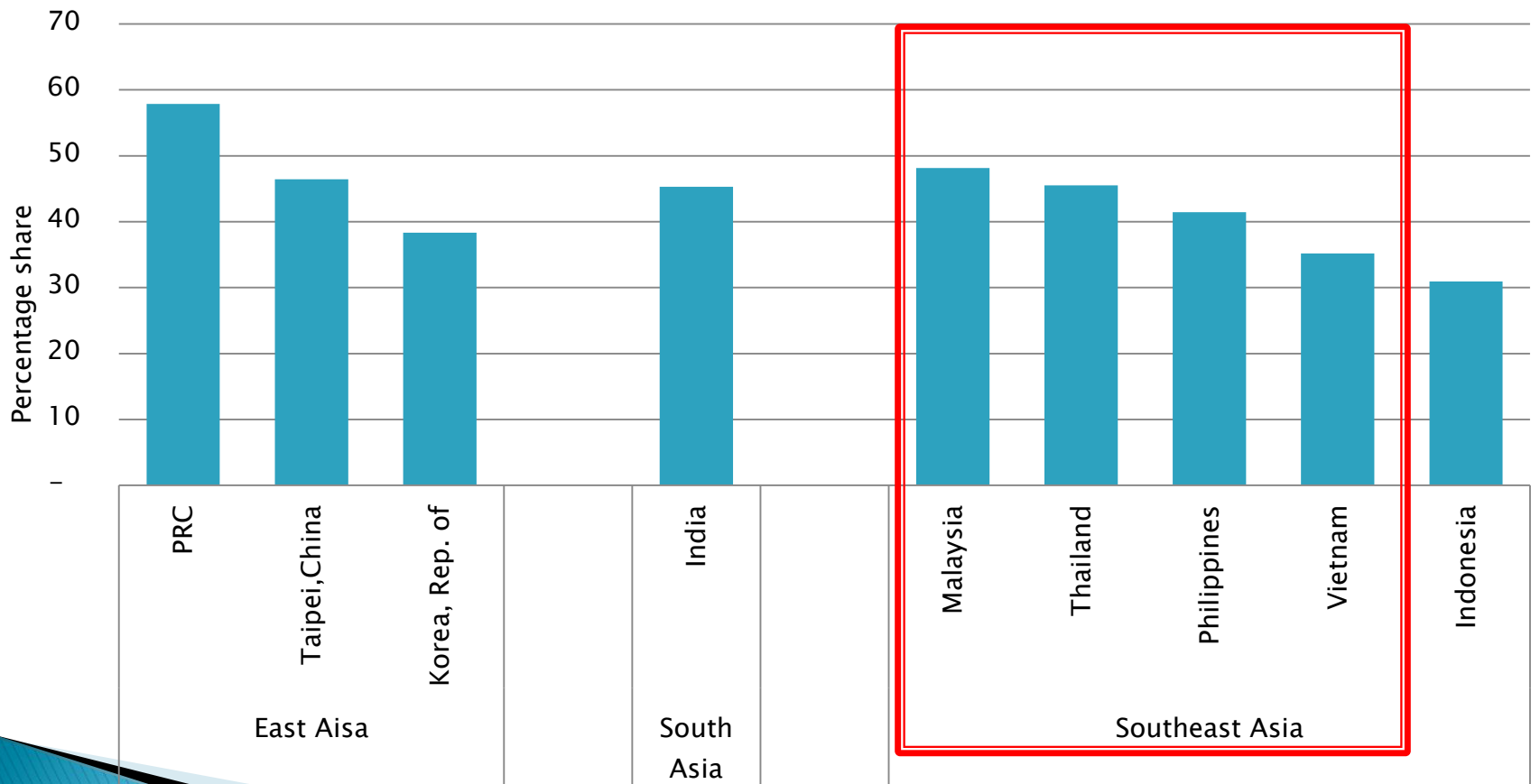




# The Importance of Indirect Exports

- These are the value added inputs of other domestic sectors to the direct exporting sector

Indirect Export Share of Value Added Exports, 2011

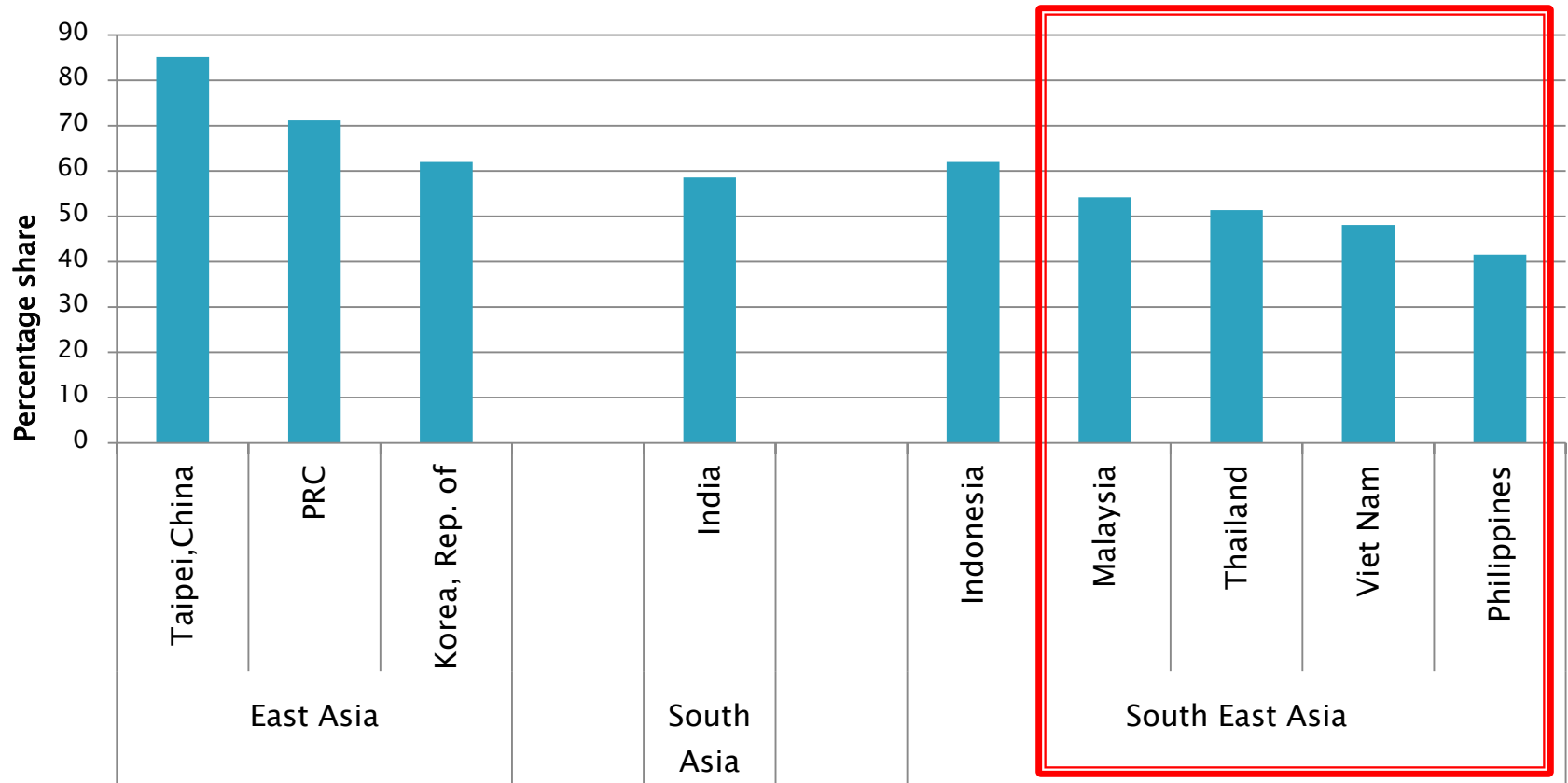


Note: PRC = People's Republic of China

Source: World Input-Output Database, Asian Development Bank, and author's calculations based on Wang, Wei and Zhu (2015)

# Business Services and Indirect Exports

## Indirect Export Share of Business Services Sector, 2011

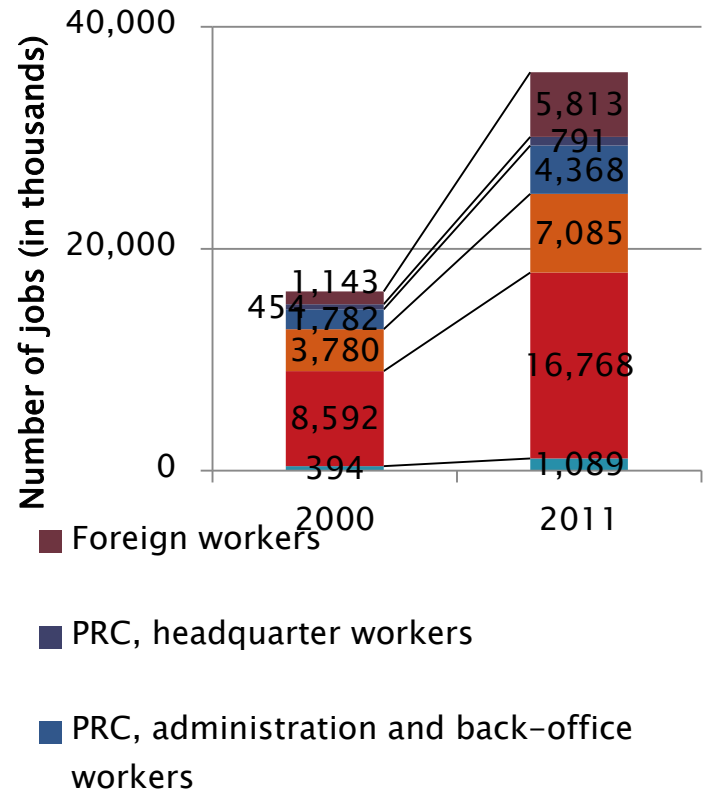
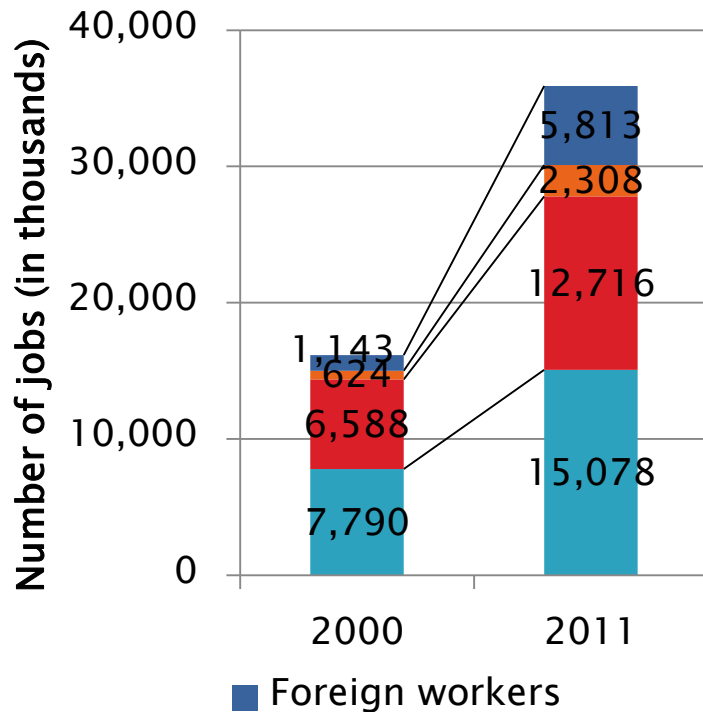


Note: PRC = People's Republic of China

Source: World Input-Output Database, Asian Development Bank, and author's calculations based on Wang, Wei and Zhu (2015)

# GVC and Jobs

An illustration of Electronics Sector in PRC (de Vries et al (2016))



Notes: Panels show the number of workers directly and indirectly involved in production of electronic products, decomposed into foreign and domestic workers, by skill type and business activity.

Source: Authors' calculations based on the ADB MRIOs, socio-economic accounts of WIOD and occupation information from the 2000 and 2010 population census.

# 3. Related Statistical Projects

- ▶ Assisting economies in the Asia and the Pacific region to produce their Supply Use Tables (SUTs) and Input Output Tables (IOTs) annually
- ▶ Extending SUTs, IOTs, international SUTs and IOTs to account for firm heterogeneity and to produce GVC statistics by firm characteristics such as size
- ▶ Extending the tables to study the effect on employment, income and environment of various economic decisions
- ▶ Expanding the tables for selected Asian countries to produce sub-national details and study the economies at a more local level
- ▶ Producing real effective exchange rates (REER) at the country and sector levels using the international IOTs

**Thank You!**